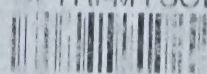


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THE FOOD OF THE PEOPLE



THE FOOD OF THE PEOPLE

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The History of Industrial Feeding

by

SIR NOEL CURTIS-BENNETT

K.C.V.O.

*Chairman of National Playing Fields Association
and Welfare Advisor to Peter Merchant Ltd.*

with a preface by

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FABER AND FABER LIMITED

24 Russell Square

London

*First published in mcmxlix
by Faber and Faber Limited
24 Russell Square, London, W.C.1
Printed in Great Britain by
Latimer Trend & Co. Ltd., Plymouth
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PREFACE

To-day the Industrial Canteen has come to be recognized as a necessary part of every well-run factory. That fact, now so generally recognized, is one of the revolutions of the war period. Sir Noel Curtis-Bennett dwells on the origins and traces the developments in social thought and industrial organization that preceded and created this change, and the obvious need for it occasioned by the strain imposed upon industry during the last two wars. He draws conclusions concerning the significance of the development of canteens and their future place in industry.

The general idea of the responsibility of the employer to feed his operatives is no new one: indeed it is very old—feudal in fact—but it is new in industrial organization.

For this reason the author has felt that a survey of industrial feeding should incorporate a good deal of information on the organization and development of industry and industrial life through the centuries.

Industrial feeding has in recent years developed into an industry of its own and called itself 'Industrial Catering'. Sir Noel has a good deal to say about the sort of food that was consumed by our ancestors, the methods by which it was produced and served, the prices at which it was sold and the ordinances that controlled its quality and distribution. Thus he puts the general subject of industrial feeding in perspective against its historical background. He considers the methods used to feed the workers

Preface *

at their place of work, whether on the manorial 'demesne' or in the workshop, and discusses the food of the peasant in his own home and the organization of public catering in London and other towns. We are, therefore, led to an inspection of the inns and eating houses, the cook-shops, the open stalls in the market place and street where apprentices bought meat pies and 'snacks'. As his survey gets nearer our own day, the author concentrates his interest on industrial feeding in its narrowest sense.

To sum up, this book gives a comprehensive picture of feeding the worker from the eleventh to the twentieth century. The author, Sir Noel Curtis-Bennett, the founder and creator of the Civil Service Sports Council and an authority on social welfare, has turned what might have been a dull repetition of facts into a fascinating story that will not only appeal to those concerned with welfare, industry and catering but to many who are interested in the social history of England and its relationship to our industrial practices and organizations.

Industrial welfare does more than add to the comfort of industrial life—it adds to its competence, and if, I may put forward a personal opinion, this is true of industrial feeding in a particular degree. Give a man a good meal and he is fitted to do a good job. Most of our present industrial canteens were started in the war because otherwise no one could rely upon the workman getting enough food: the problem of quantity remains and will pass. Another question will persist—that of suitability both in selection and in cooking. Here the craft and skill of the cook and the knowledge of the scientist need to be harnessed: when that is done Industrial Catering will fulfil its task of improving the health of the nation and adding to its economic strength.

WOOLTON

AUTHOR'S NOTE

I must take this opportunity of thanking all my old friends, and the new friends and acquaintances that I have made during the course of my investigations, for their assistance—without them I should have found it most difficult to collect and collate much of the information set out in *The Food of the People*.

I would especially like to express my gratitude to Mr. Ronald Ogden, who assisted me during the whole period of this book's development, for his untiring work on research and for his sound and excellent advice. I am also much indebted to the management and staff of Peter Merchant Limited, the former for giving me freedom of access to their vast organization, the latter for their willing help and co-operation.

NOEL CURTIS-BENNETT

ACKNOWLEDGEMENTS

The author and publishers wish to record their grateful thanks to the following for permission to quote from works still in copyright.

Messrs. Edward Arnold & Co. Ltd.; *A Social and Industrial History of England*, by F. W. Tickner. The Syndics of the Cambridge University Press; *Life on the English Manor*, by H. S. Bennett, and *The Growth of English Industry and Commerce*, by W. Cunningham. Messrs. Jonathan Cape Ltd.; *The Englishman's Food*, by Sir Jack Drummond and Anne Wilbraham. Messrs. J. & A. Churchill Ltd; *The Health of the Industrial Worker*, by E. L. Collis and M. Greenwood. Messrs. Longmans Green & Co. Ltd; *Tudor Economic Documents*, by R. H. Tawney and E. E. Power. The Manchester University Press; *The Coal Industry of the 18th Century* and *Samuel Oldknow and the Arkwrights*, by George Unwin. Messrs. Methuen & Co. Ltd.; *The Manor and Manorial Records* by Nathaniel Hone. Messrs. Routledge & Kegan Paul Ltd; *Life and Work in Mediaeval Europe*, by Boissonade, translated by Eileen Power. The author and publishers also wish to acknowledge with gratitude the following plates: Plate 6, portrait of Robert Owen, to the National Portrait Gallery; Plates 1, 2, 3, 4, 5, 7, 8, 9, and 10, to Picture Post Library.

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Chapter I

THE MIDDLE AGES: COUNTRY

THE FEUDAL INDUSTRIAL AND SOCIAL UNIT

In medieval times in England, the feudal organization of society gave to the Royal or baronial kitchen and dining-hall very much the nature of a modern industrial catering unit. The King was the centre of the court and it was his responsibility to feed and provide generally for his followers. These ran into several hundreds and all needed shelter and sustenance. As soon as he established himself in England, William I set about a policy of decentralization, parcelling out lands and manors to his barons, many of whom were cooks and craftsmen in their own land who had thrown in their lot with the adventurous duke and were now being paid for their services. These gentlemen set up their own large households and became themselves centres of economic units, the basis of which again was food. Land was valuable because it could be cultivated. Out of the chalky soil of Wiltshire, the flint-strewn soil of Buckinghamshire or the heavy clay of Sussex, men had to wrest a living—not in terms of pounds, shillings and pence, but in terms of wheat and livestock. Anglo-Saxon methods of tillage were improved by the Normans but the old system of commonland cultivation was continued under the authority of the Norman masters. Instead of each peasant having his own self-sufficient plot of land as they do to-day in parts of Europe and in England, each man owned several strips, generally of about half an acre, in a large communal field. This field would be ploughed and sown by

The Middle Ages: Country

communal effort and each man would reap the portion of the crop which grew on his own particular strip. The lord of the manor generally owned a number of strips on these communal fields which were cultivated by the joint effort of the people and the crop rendered to him as part of his feudal dues. He also owned a separate holding known as the demesne on which the villagers worked for so many days a year according to their standing.

That the medieval manor was a highly organized industrial unit whose object was to provide food and shelter for the community and profit for the land is shown by the number of officials, or executives, as we should call them to-day, whose duty it was to see to the smooth efficient running of the manorial machine. These are enumerated by Mr. Nathaniel Hone in his *Manor and Manorial Records* and include the steward, the reeve, the bailiff, the hayward, the ploughman, the waggoner, the cowherd, the swineherd, the shepherd, the tithing man or constable, the ale-tasters, the smith, the carpenter, and various surveyors and assessors. The work of these men was generally that of supervision and departmental organization. The hayward for instance had to be 'an active and sharp man'; he must rise early and look after and go round and keep the woods, corn and meadows, and other things belonging to his office, and he is to superintend the sowing. He is to look after the customary tenants that they come to work when they are bound to do; in haytime he is to overlook the mowers, and in August assemble the reapers and the labourers. The ploughman, in addition to being 'a man of intelligence' who should know how to repair ploughs and harrows and 'till the land well', should be able to ditch and drain the land. The shepherd's wife was mistress of the lords' dairy with a milkmaid to work for her, the shepherd had certain privileges in connection with his office such as the use of the lord's plough on occasions, fifteen sheep in the lord's fold and their milk, a daily cup of newly drawn whey for his dog from Hocktide to the 1st of August. These facts are quoted from Walter of Henley's famous book of husbandry which was probably written in the early part of the thirteenth century; also from anonymous treatises of round about the same date entitled 'Hosebonderie'

The Work of the Manor

and 'Seneschaucie', the latter of which gives specific details of the duties of the manorial officials.

THE WORK OF THE MANOR

The actual work of the manor is admirably described by Mr. Nathaniel Hone, who writes: 'Michaelmas or the period after harvest was the natural commencement of the farming year. . . . The first work was the ploughing of the wheat field, while the other two fields lay in stubble; at its completion the sowing of the winter wheat and rye was taken in hand. . . . The cattle, at the completion of ploughing, were brought in from their pasture and stalled in their sheds for the winter, to be watched over by the ploughman, whose duty it was to fill the ox-bins with hay and water. . . . The winter's preparation of food entailed the slaughtering of beasts and swine and the curing of carcasses. Threshing was also a winter employment; not only the grain, but the peas and beans were threshed; the grain was bruised with flails . . . and winnowed by hand; women being frequently employed as appears in the bailiff's accounts. Wheat and rye were ordinary foodstuffs of the people, malted barley being, of course, used for brewing.

'On the break up of the winter, the main work of the year began, usually in February, with the spring ploughing of the second field, in preparation for the spring sowing of peas, beans, and vetches or oats and barley.

'This ploughing was the "week's work" of the customary tenants, and lasted from Candlemas to Easter, the stubble, since the previous August, having been the feeding ground of hens, sheep and other stock. . . . Those tenants not employed in ploughing found their spring duties awaiting them in the enclosures of the lord's demesne. The manor usually possessed a garden and an orchard; in the former were grown leeks, onions, mustard and peas.'

The orchards, as shown from bailiffs' accounts, produced apples which were largely grown for cider, also pears, quinces and later more exotic types of fruit. The permanent hedges would need repairing and the plants and herbs to be set out.

The seed would be sown after the spring ploughing and then

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in May or June the third field in fallow would be prepared. It had to be ditched for drainage, manured and limed. There was also weeding to do and sheep had to be sheared and washed. Building repairs had to be done both to the lord's and the peasant's own property. There were fines for the peasant who did not keep his dwelling in good repair and an allowance of timber was made to him from the lord's supply to enable him to do so. Folds and pens had to be set up, weirs made and 'last of all the summer duties was the repairing of the lord's mill, which formed a necessary feature of every estate, and was generally farmed out by the lord, the miller taking his toll of the tenants, upon whom it was compulsory to bring their grain there to be ground'.

Another compulsory service for which the lord often exacted payment from the tenant was that of having his bread baked in the lord's manorial oven. . . . This may, to a certain extent, have been a convenience provided the toll taken was not too large, as, to use the words of Mr. H. S. Bennett in *Life on the English Manor*: 'Many peasants had not the means of baking at home; the construction of an oven was a semi-skilled affair, and many houses could not have included one in their flimsy structure without grave risks and great difficulty. So the lord's oven must not be looked upon purely as a seignorial oppression . . . so long as the baker did not exact too large a fee for his work the village oven or bakehouse was a communal convenience.' The burden of these compulsory monopolies, as some authorities have pointed out, probably lay in the long distances which often had to be travelled over abominable roads to bring corn to be ground or bread to be baked; of waiting perhaps for days for a favourable wind or water-stream and of having to accept ill-ground meal or burned or half-baked bread and 'enduring all sorts of tricks and vexations from the millers or bakers'. On the whole, however, as the authors of *The Golden Fleece* have admirably summed up the question: 'The old manorial system was hard but it was human. The lord lived on his estate and knew his tenants. They worked on his demesne and took up their quota of produce to his manor. They helped him in his hunting, and were proud of his magnificence and his guests. Their wives and daughters cooked and sewed and spun

Royal Catering

for the ladies of his household. On Sunday and festivals all would assemble together in the village church. On holidays the lord would attend the sports on the village green, his sons would join in them, and the tenants would be feasted at the manor. At Christmas time there would be general wassailing and merry-making, and mutual tokens of goodwill.¹

In connection with feasting, Hackwood² writes of a legendary orgy known as 'glutton mass' which, he says, was celebrated five times a year in honour of the Virgin Mary. Early in the morning, according to his account, 'the parishioners assembled in the church, laden with stores and provisions; Mass was then said, after which the priests and the people began to feast, so that the church became a scene of rioting and intemperance, and neighbouring parishes often contended which should hold the greatest feast'!

Whether there is contemporary evidence for this story or not it is difficult to discover. But it is quite in keeping with the general medieval habit of jumbling together the sacred and profane.

ROYAL CATERING

As the head of the feudal social organism, the king had peculiar catering problems to deal with, and it is not surprising that large scale provisioning was found necessary for the royal household.

William the Conqueror, we are told, attached particular importance to his cuisine which he transplanted in bulk from Normandy to England after the Conquest. A menu which has come down to us from his Court includes:

Boar's Head with its tusks in its snout, garnished with flowers.
Venison, cranes, peacocks, swans, wild geese, kids, pigs, and hens.
Spiced and seasoned meats with wines red and white.
Pheasants, woodcock, partridge, larks, plovers and brawn.
White powder and large sweetmeats.

When Richard, brother of Henry III, married Cincia, daughter of Raymond, Count of Provence, the number of dishes

¹ *The Golden Fleece*, pp. 67-8, Morris & Wood.

² Frederick Hackwood, *Good Cheer*.

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served up amounted to thirty thousand. We have authentic documents describing the supplies required for King John's Christmas feast in 1213. From these we learn that a certain Reginald de Cornhill was commanded to 'cause Galfrid the salter to receive for us 40 lbs. of pepper, 6 lbs. of cloves, half lb. of "gario fili" (at 20s. per lb., what it was nobody appears to know), half lb. of nutmegs, 3 lbs. of cinnamon, 3 lbs. of ginger.'

On 12 December the same year the keepers of the Royal Wines at Southampton are ordered to supply three hogsheads of wine; and on 17 December de Cornhill is again commanded to send to Windsor 'twenty hogsheads of wine, costly good and new, both Gascony wines and French wine, and four hogsheads of best wine for our own drinking (*ad os Nostrum*) both two of white wine and two of red wine, and that it be sent without delay, that it may be received before the day of the Nativity. And we require, for our use, against that day, 200 head of pork, and 1,000 hens and 500 lb. of wax and 50 lb. of pepper and 2 lb. of saffron and 100 lb. of almonds, good and new, and two dozen napkins, and 100 ells of linen cloth, to make table cloths, and 50 ells of delicate cloth of Rancian, and of spiceries to make salses (probably pickles) as much as ye shall judge necessary, and that all these be sent thither by Saturday or Sunday nearest Christmas. And ye shall send thither 15,000 herrings and other fish, and other victuals as Ph. de Langeburgh shall tell you. And all these ye shall buy at the accustomed market, as you may deserve our thanks, and according to custom you shall give in your account to the exchequer. Concerning pheasants or partridges and other birds, which you shall seek for our use, you shall have them from the manor'.

Further precepts enjoin the Sheriff of Buckinghamshire to purchase on the king's behalf 500 hens and 20 swine and to send pheasants, partridges and other birds from the King's manor of Wallingford. One Matthew Mantell is also ordered to purchase 200 head of pork and 1,000 hens, while 'John the son of Hugh', probably a keeper in one of the king's forests, is commanded to send to Windsor, brushwood, charcoal, torches and 'cyppes' with 500 more hens, pheasants and other birds. The Sheriff of Canterbury is ordered to send 10,000 salt eels.

Catering on the Move

We are also told that 'the household accounts of Richard II show that every day ten thousand people sat down to meat at his charges, the royal kitchens serving out the messes to them by the hand of three hundred servitors'.¹ We are also told that 28 oxen and 300 sheep were slaughtered daily for the table of this king.

The provisions of Richard II and the Duke of Lancaster when they dined with the Bishop of Durham in London in September 1387 'suggest the victualling of a town against a siege', says Mr. L. F. Salzman, in *More Mediaeval Byways*. Requirements included 120 sheep, 14 salted and 2 fresh oxen, 140 pigs, 12 boars, 210 geese, 720 hens, 50 capons, 50 swans, 100 dozen pigeons, 11,000 eggs, 120 gallons of milk, 12 gallons of cream. At Christmas 1246 the court of Henry III ordered 1,000 chickens, 1,100 partridges, 1,100 hares, 1,100 rabbits, 10,000 eels, 36 swans, 54 peacocks, 90 boars 'with their heads whole and neatly carved'.

CATERING ON THE MOVE

In the Middle Ages a large number of people were invariably on the move. This created a catering problem of its own as is clearly shown by one historian's description of baronial and royal 'progresses'. After describing a typical pilgrimage, such as that immortalized by Chaucer in his *Canterbury Tales*, Tickner in his *A Social Industrial History of England* imagines an observer of medieval life falling in with 'the retinue of some manorial lord travelling to one or other of his manors. There he will stay for a time and consume the produce of the estate before moving on again to the next. He is accompanied by his steward, by some of his clerks and other minor officials, and by the various members of his kitchen staff. His retainers all wear his badge, and many of them look like old soldiers who could fight well for him at need. They are followed by a long train of pack-horses and heavy wagons carrying the requirements of his household. Or we may meet with some bishop and his train moving likewise to one of his manors or engaged in a pastoral visitation of the churches of his diocese. His equipage is very much like that

¹ Hackwood, op. cit.

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of the baron, and there is something of a military air about the whole procession.

‘The King also is generally moving through the realm with a large and imposing retinue. He is preceded by twenty-four stalwart archers, and accompanied by two marshals who arrange the movements and resting-places of the company and have power to arrest all offenders along the line of march. Then there are the officials of the Court, and the nobles who are in attendance upon the king with their trains. He may also be accompanied by officers responsible for the administration of justice in certain cases. Notice is given to the sheriffs as to where the trials will take place, and they attend there with the prisoners.

‘It was no easy matter to provide food and means of conveyance for the royal train, and the difficulty was met by the recognition of the king’s right of Purveyance. By virtue of this he was preceded by purveyors, servants who had authority to buy up food at customary prices for a space of two leagues on both sides the road the king was to follow, and to take all the necessary means of transport at fair prices from the people. Under unconstitutional kings such as Richard II this right of purveyance led to grievous wrong-doing; horses and carts and provisions of all kinds were seized and only a wooden tally given in return, an acknowledgement of debt which was rarely redeemed. No wonder that on the approach of the king’s retinue the wretched peasants, who were unable to escape by bribing their oppressors, would sometimes flee to the woods with their movable goods, and wait there until the king had passed. Nor did the king always get for his own use the materials seized, the purveyors would keep the best for their own use or sell them again at a profit, and there were even those who pretended to be king’s purveyors and so robbed the poor.’

MANORIAL CATERING

After the King in order of power and magnificence came the great barons and manorial lords, who, as the heads of such large industrial units as we have seen the manors to be, had their catering problems also. The manor house itself was a large

Manorial Catering

building, primitive in its simplicity and, in early days, fortified against attack from rival landlords, brigands and outlaws, or even the King himself, and containing a vast number of retainers. These retainers were fed from the master's kitchen and ate their meals in the same great hall as the lord and lady.

In England we do not need very much imagination to be able to picture the scene, particularly with the documentary evidence which still exists of some of the menus.

Dinner was at nine o'clock in the morning to be followed by supper at five in the evening. These two meals sufficed to sustain a full day which lasted from five in the morning till nine at night. Although the quantity and variety of food found in old accounts often seem excessive even for a rich nobleman's table, no doubt when one takes into account the numbers who had to partake of it the fare only just sufficed to satisfy the retinue.

The lord, his lady, their family and honoured guests sat at the head of the long table while further down sat those of lesser degree. An important feature of the medieval table was the salt cellar, often a richly ornamented affair, which marked the boundary line between those of honourable estate and the smaller fry or commoners. The steaming dishes would be brought in one by one, often with fanfares of trumpets, and distributed to the eager throng, who ate with their fingers aided by the offices of a sheath knife. Men and women ate off the same plate and tossed bones and scraps to the dogs who lay on the rush-strewn floor. Medieval books on etiquette abjure readers not to spit on the table, wipe their fingers on their clothes or exhibit signs of excessive greed or impatience.

As Mr. Frederick Hackwood states in his book *Good Cheer*: 'The barons in general spent an excessive proportion of their large revenues and all the produce of their vast domains in the exercise of lavish hospitality, the tables of their castles being ever open to strangers as freely as their vassals and followers.'

As England settled down under her Norman conquerors refinements began to creep in. The big central fire in the dining hall from which the smoke, if it did not find its way up to the hole in the roof put there by way of a chimney, must often have

The Middle Ages: Country

gone near to choking the occupants, gave place to the open fireplace at either end of the room with properly constructed chimney to carry off the smoke. Tapestry found its place upon the walls and windows were covered by shutters to keep out the draught, glass being still an almost unheard-of luxury.

Galleries were built for minstrels and troubadours to entertain the diners much in the same way as E.N.S.A. parties during the war entertained workers in factory canteens. Much of the subject matter treated by these minstrels centred on food and the costly and extravagant banquets of the barons. 'The tables', we are told, 'literally glittered with gold and silver'¹

The modern pie evolved in these days when birds were served 'in their coffins'. This particularly applied to the peacock whose gorgeous plumage the cooks thought too colourful for the diners to miss. In fact the medieval gourmet took a great deal of trouble not only to have his food tasty but to see that it was pleasant to look at as well.

The boar's head 'garnished with flowers', already quoted, is a typical example of this. Other succulent dishes beloved in the Middle Ages, we are told, were 'porpoises or sea swine', 'whale' and 'sea wolf'. Owing to difficulties of preserving food it was often tainted and masses of spice were necessary to cover up its rankness. In autumn, owing to the ignorance of winter feeding for cattle and poultry, a large number of animals and birds were killed off and salted down for winter consumption. Spices were necessary to add flavour to the universal dullness of such fare, particularly as vegetables were rare and hardly used at all.

'The halls of baronial mansions and large manor houses were all arranged for the convenience of taking meals. At the lower end of the hall was a passage hidden by a screen, leading into the kitchen, from which smoking dishes were easily carried from broach or cauldron to the tables—on grand occasions always in procession. An open drain ran through kitchen and scullery till the time of Henry III when these cloacal conduits were covered up and carried underground. The upper end of the hall was lighted by a large bay window; here was the dais on which stood the lord's table, and close by an open cupboard

¹ Synge, *A Social History of England*.

Manorial Catering

which contained the family plate. Below the dais was the large table, extending nearly the length of the hall. The table ceremonial of a great noble (like Warwick the Kingmaker for instance) was as picturesque as it was rigid in observance. At the dinner hour—10 a.m.—the Earl appeared in his place, with his splendid retinue of secretary, councillors, marshal, steward, and master of the house, his chaplain and choristers who officiated in his chapel and chanted the grace at his table, his constables, heralds, guards, pursuivants, pages and trumpeters and his jester.

‘When all the guests and retainers were assembled the master steward knocked loudly on the oaken board, the blessing was chanted, and everyone seated himself according to his rank, the noble and gentry on the dais, and also at the central table till they came to the huge silver salt cellar, the line of demarcation below which the common people sat. Any caitiff who presumed to sit out of his order stood a chance of being pelted by the company with the bones they had picked. Then came in the train of servants bearing the pewter dishes loaded with beef and mutton, fresh and salted, fowls and fish, pasties and loaves, wastel and simnel bread, the strange and numerous compounds which formed the dessert, and the flagons of wine, ale, and beer which was freely served to the company by troops of waiters—to the higher guests in silver cups, to the lower tables in cups of pewter, horn or wood. Beeves, sheep, pigs, geese, fowls, venison and game were washed down with copious draughts of English ale or foreign wine. The extent of a baronial larder may be gauged by the stores recorded as stolen from one of the baronies of the Elder Dispenser in the reign of Edward II—80 carcasses of beef, 600 carcasses of mutton and 601 fitches of bacon.

‘For three hours or more the company sat at this meal, now and then bursting into uproarious laughter at the jokes of the jester, or at the pranks of the tumblers, jugglers and buffoons. Digestion was also aided by the minstrels who discoursed sweet music in the gallery.’¹

By the time of Edward II, we are told, ‘so excessive was the

¹ Hackwood, *op. cit.*, pp. 100–102.

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demand made upon the households of the great, that the barons were compelled, owing to a series of bad harvests, to restrict some of the extravagances which had so long prevailed. An ordinance was issued, which denied to the outside servants and hangers-on at the baronial establishments the free quarters they had so long enjoyed. No one was to claim victuals under colour of minstrelsy or errand-running (*messengerie*). In the hostels of prelates, earls and barons not more than three or four honourable and genuine minstrels were to be allowed free board. The ordinance also cut down the number of courses upon men's tables; two courses of flesh or four sorts of each were to suffice; prelates, earls, barons and magnates might have an 'entremet of one manner of charge' at their tables. In 1336 Edward II enacted: 'No man shall cause himself to be served in his house or elsewhere at dinner, meal or supper, or at any other time with more than two courses, and each mess of two sorts of victuals at the utmost be it flesh or fish, with the common sorts of pottage, without sauce or any other sort of victuals; and if any man chose to have sauce for his mess he well may, provided it be not made at great cost: and if flesh or fish are to be mixed therein, it shall be of two sorts only at the utmost, either fish or flesh and shall stand instead of a mess.'¹

DOMESTIC ARRANGEMENTS OF THE MIDDLE AGES

'A noble specimen of an old banqueting-hall in a baronial mansion of the time of Edward III is still to be seen at Penshurst in Kent, the seat of the Sidneys.' A recent writer describes this hall in the following words: 'The hall and its immense, strongly-jointed table exhibit a rudeness which belongs to a martial age when both gentle and simple revelled together, parted only by the salt.

'The floor is now of brick. The raised platform, or dais, at the west end, advances sixteen feet into the room. The width of the hall is about forty feet, and the length of it is fifty-four feet. On each side are tall Gothic windows, much of the tracery of which has been some time knocked out and the openings plastered up. At the east end is a fine large window, with two smaller ones

¹ This Statute has never been repealed.

Domestic Arrangements of the Middle Ages

above it; but the large window is, for the most part, hidden by the front of the music gallery. In the centre of the floor an octagonal space is marked out with a rim of stone, and within this space stands a massy old dog, or brand-iron, about a yard and a half wide, and the two upright ends three feet six inches high, having on their outer sides near the top the double broad arrow of the Sidney arms. The smoke from the fire which was laid on this jolly dog ascended and passed through the centre of the roof, which is high and of framed oak, and was adorned at the spring of the huge groined spars with grotesque projecting carved figures, or corbels, which are now taken down, having been considered in danger of falling, and are laid in the music gallery.

‘The heavy oak tables, which are of a somewhat later period, remain. That on the dais, the lord’s table, is six yards long and about one wide; and at this simple board (says William Howitt) no doubt Sir Philip and Algernon Sidney, the Countess of Pembroke, Saccharissa, Waller, Ben Jonson, and, though last mentioned, many a noble and some crowned heads have often sat to dine. At one time the gentle and pious Edward VI, at another his more domineering and shrewd sister Elizabeth, with her proud favourite, Leicester or Essex, Cecil or Warwick, all allied to, or in habits of intimacy with, the lord of the house. James I, and Charles, then prince, no doubt took their seats here; and the paintings in the gallery and rooms above will show us many a high-born beauty and celebrated noble and gentleman who have graced this old hall with their presence, and made its rafters echo to their wit and merriment.

‘The tables down the centre of the hall, at which the yeoman retainers and servants sat, are seven yards long, and of a construction several degrees less in remove from the common trestle.

‘At the lower end of the hall is a tall wainscot screen supporting the music gallery, the plainness and even rudeness of its fashion marking the earliness of its date. The space betwixt it and the end of the hall forms a passage from one court to the other, and serves also to conceal the entrances to the kitchen, larder, and other similar offices.

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'On each side of the dais, as in our old colleges, ascends a flight of one hundred stairs, one leading to the old apartments of the house, the other into a sort of little gallery, out of which the lord could look into the hall and call his wassailers to order if any unusual clamour or riot was going on, or call to any of his menials, bells not then being in use.

'On the right hand of the dais is the entrance into the cellar—very convenient for the butler to bring up the wine to the lord's table. Such was the arrangement of a baronial banquetting-hall in the olden time.'

The same writer continues: 'A great English noble had, besides his castle, several baronial halls, and manor-houses on his various estates, and often a house in London as well. Between these places he was constantly moving, and at every migration he carried in his impediments the chief of his domestic utensils, his brass pots, cooking utensils, and perhaps crockery. At each house the farm and the orchard provided his provisions; it always contained cellars and spiceries well stored. He kept his own baker and breweress, and even made his own candles from the fat of the mutton and deer.

'On the great occasions upon which he sat in baronial state to receive the homage of his tenants, give audience to their petitions and complaints, and transact other seignorial business, the day was concluded by a great feast in the hall, at which the resources of the estate were seen in the profusion which graced the boards. The manor-house often enough was called "the hall" from the great apartment in which this took place.

'Besides the hall, one private chamber was allotted to the lord of the house. The cook had his kitchen, adjacent to the hall; there was the sewery for the sewer, or officer who served and removed the dishes, and tasted them to prove their fitness; and there was the butlery.'

A glimpse of the domestic arrangements of such a household is given in the Household Roll of Richard de Swinfield, Bishop of Hereford, 'who was constantly moving about from manor-house to manor-house. The baker always preceded the family; his office was an important one, and baking-day was always Saturday.

Domestic Arrangements of the Middle Ages

‘When the provender had been gathered from the different farms, the episcopal kitchen reeked with food, and all the necessities of life produced on the estate. Due care was taken that the cellars were kept full of wine and the spiceries with foreign luxuries. The kitchen and ovens were put into working order, wood and charcoal were brought in from the forest, and also loads of thorns to crackle under the pots.

‘Being the bishop’s household, we find evidence in the Roll that all the days of abstinence were observed. Wednesday, Friday and Saturday were days of abstinence. On these and the seasonal fasts (as in Lent and on certain vigils) vast quantities of fish were consumed; we read of “sticks of eels”, twenty-five on a stick; of salmon, lampreys, and lamperns from the Severn, and of trout in plenty during the season of the May-fly; of fresh mackerel in June, and of gallons of oysters in the winter; of dried cod brought from Aberdeen, and salt herrings kept in store.

‘Gruel we find served in abundance, and soup is mentioned. Allusion is made to the activity of the salting-tubs at Martinmas—salt was widely distributed from Droitwich in Worcestershire, or from one of the Cheshire “wiches”, all over the kingdom, except to certain places round the coast, where salt was obtained by the evaporation of sea-water—for the pickling or curing of beeves, swine, sheep, and deer; and we may even be permitted to infer the use of salted greens, from the scant supply of fresh vegetables recorded. The office of house steward was no sinecure in a baronial establishment of olden times.’

Coming to the fifteenth century we get a faithful picture of a later medieval royal household in the ‘Rules of the House’ of ‘the righte excellent princesse Cicill late mother unto the right noble prince Kinge Edward IV’ which still exist:

‘Upon eatynge dayes, at dynner by eleven of the clocke, a first dynner in the tyme of highe masse, for the carvers, cup-bearers, sewars and offycers.

‘Upon fastinge dayes, by twelve of the clocke, and a later dynner for carvers and for wayters.

‘At supper upon eatynge dayes for carvers and offycers, at four of the clocke: my lady and the householde at five of the clocke, at supper.

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‘When my lady is served of the second course, at dynner, at supper, the chamber is rewarded and the halle with breede and ale, after the discretyon of the usher. (That is those whose different stations in the family entitle them to sit either in the chamber or the hall are at this time regaled with bread and ale.) Rewardes from the kytchen there is none, savinge to ladyes and gentlewomen; to the head offycers if they be present; to the deane of the chappelle, to the almoner, to the gentlemen ushers, to the clerke of the kytchen, and to the marshall.

‘There is none that dyneth in their offyces savinge only the cookes, the scullery, the sawcerye, the porters, the baker, if they be occupied with bakeinge.

‘Upon Sondaye, Tuesdaye, and Thursdaye, the household at dynner is served with beefe and mutton, and one roste; at supper, leyched beefe (i.e. in shives) and mutton roste.

‘Uppon Mondaye and Wensdaye at dynner, on boyled beefe and mutton at supper, ut supra.

‘Upon fastinge dayes, salte fyshe, and two dishes of fresh fyshe; if there come a principall feaste, it is served like unto the feaste honorablye.

‘If Monday or Wensdaye be hollidaye, then is the household served with one roste, as in other dayes.

‘Upon Satterdaye at dynner, salt fyshe, one fresh fyshe, and butter; at supper salt fyshe and egges.

‘Wyne daylie to the heade offycers when they be present, to the ladyes and gentlewomen, to the deane of the chappelle, to the almoner, to the gentlemen ushers, to the carvers, cupbearers and sewers, to the cofferer, to the clerke of the kytchen, and to the marshall.

‘Upon Frydaye is made payments of all manner of fresh cates; at every month ende is made paymente of all manner of other thinges. (Cates, or provisions opsonia, were the more delicate or more perishable foods, to be eaten with bread. A “Caterer” was a purveyor of such viands.)

‘Proclamacyon is made foure times a yeare about Berkamsted in market townes, to understande whether the purveyors, cators, and others, make true payments of my ladyes money or not, etc. etc.

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'Breakfastes there be none, savinge onely the head offycers etc. (as before enumerated).

'All other offycers that must be at the bereavement (a slight morning repast), have their breakfaste together in the compting house, after the bereavements be made.

'Lyvery of breade, ale, and fyre and candles is assigned . . . whole lyverie of all such thinges as is above specified, from the feaste of Allhallowe unto the feaste of the purification of our Ladye; half lyverie of fire and candles unto Good Fridaye; for then expireth the tyme of fyre and candle alsoe.'

In the fifteenth century 'gentlefolk breakfasted at seven off bread and beef, ale and wine. Dinner followed at ten and sometimes lasted till one. Supper generally came at four, and was as substantial as the breakfast; then between eight and nine the "livery" or evening collation, consisting of bread, ale and spiced wine was had, generally in bed.' Here is an extract from the Journal of Elizabeth Woodville, who became the queen of Edward IV:

'10 May 1451.

Six o'clock (a.m.) Breakfasted. The buttock of beef rather too much boiled, and the ale a little the stalest. Memorandum: to tell the cook about the first fault, and to mend the second myself by tapping a fresh barrel directly.

Ten o'clock (a.m.) Went to dinner. . . .

Seven o'clock (p.m.) Supper at the table. . . . The goose pie too much baked, and the loin of pork almost roasted to rags.'

Next in rank to royalty and nobility came the 'franklins' or 'country gentlemen', a typical example of whom Chaucer calls 'Epicurus's own son.' Of him he writes:

*Withouten bake mete never was his hous,
Of fish and flesh, and that so plenteous
It snewed in his hous of mete and drinke,
Of alle daintees that men could of thinke.
Woe was his cook but if his sauce were
Poinant and sharpe; and redy all his gear.*

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Hackwood says of him: 'In his hall stood his table "redy covered alle the longe day"; and instead of retiring "to the privy parlour", like the baron, to evade the duties of the festive hall, he was the Saint Julian "in his countree", the patron and host of all travellers. Abundance rather than quality was the distinguishing feature of his household provisions; ale and wine, bread and baked meats, birds and game, and stewed fish, varied according to the season of the year; but the franklin boasted no foreign dishes or cookery such as the nobles took pride in; and instead of earthenware dishes and plates, the luxuries of the baronial halls, his family and honoured guests were accommodated with wooden trenchers and leather jacks. He was the prototype of the "fine old English gentleman" whose patriotic fervour could conceive of no finer dish than "the roast beef of old England".'

Naturally the kitchens where these enormous meals were cooked were of stupendous size and employed vast numbers of workers. Of these there have survived several which may still be seen to this day. One is at Lumley Castle, Durham, said to be the 'loftiest and most stupendous in the kingdom, where on occasion a dinner for a regiment of soldiers might be cooked'. Raby Castle has a fourteenth-century kitchen thirty feet square with three large fireplaces in it, the smoke escaping from a louvre in the roof.

A good idea of the catering problems of these times is given in the account of the food deemed necessary for the maintenance of a thousand men for forty days at Dover Castle:

180 quarters of wheat, to provide a loaf a day per man; 600 gallons of wine; 260 quarters of malt, with which to brew 520 gallons daily of ale; 104 score carcasses of meat in addition to 270 carcasses of bacon and 162 of mutton (for the 18 meat days of the forty); 18,000 herrings, 1,320 cod and 600 stockfish for the 22 fish days. The whole accompanied by a goodly measure of cheeses, mustard, pepper, salt, spices, vinegar and verjuice.'

MEDIEVAL 'BOONWORK'

Probably the earliest records we have of industrial feeding in its narrowest sense lie in those which describe the custom of

Medieval 'Boonwork'

supplying food and drink to the 'villeins' or manorial tenants, when they undertook 'boonwork' for their manorial lord. This boonwork must not be confused with the 'week-work' exacted by the lord as a regular weekly contribution of work on the demesne land in payment for the villein's holding. 'Boonwork' was work expected 'on certain days in times of pressure, such as harvest'. The number of days so exacted per year were fixed by the custom of the manor. It was customary for the lord of the manor to supply food and drink to the workers on these occasions. The fare provided is described in several manorial accounts. As Nathaniel Hone states in *The Manor and Manorial Records*: 'A study of manorial records . . . shows that there were certain feasts given by the lord which appear to have been regarded as the rights of his tenants, and in the number and character of which great uniformity prevailed; one of these occurring at the end of the ploughing and the other at the time of the harvest gathering. . . . The beneform (the "beanfeast" of modern days) was a dinner or "corrody" given at the end of the precatations or special works required of the tenants at harvest times. This custom was prevalent on the estates of the Bishop of Durham early in the twelfth century.

'In the accounts of the manor of Bocking, in Essex (thirteenth century), is an estimate of the cost of the autumnal precatations or boon days. The expense of the food provided for the reapers is weighed against the value of their work, and there is a balance in the lord's favour of 5 $\frac{3}{4}$ d. The tenants owe for two bedrips or reapings in autumn, 146 men, whose works are worth at 2d. a man 27s. 8d., and they were to have towards the doing of said work 5 seams and 3 bushels of wheat and rye, worth 17s. 11d.; at the first bedrip, 200 herrings worth 1s.; in addition there were provided 21 $\frac{1}{2}$ cheeses worth 2s. 9 $\frac{1}{4}$ d., 2 bushels of peas 5d., with salt and garlic 1d. This was a dry bedrip; it would be a wet or ale bedrip if the lord allowed good liquor.

'At Chalgrove, Oxon, the Hundred Rolls show that a yardlander reaped at the two precatations in autumn with all his household, except his wife and shepherd. Two repasts were provided: at "nones" a wheaten loaf, pottage, meat, and salt; at supper, bread and cheese and beer and enough of it, with a

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candle while the reapers were inclined to sit. The last day of the bedrip was the grand day. At Piddington the tenants on that day came accompanied by their wives, furnished with napkins, dishes, platters, cups and other necessary articles.'

In 1222 each reaper in Essex had a loaf and a half to himself, and they had in common, a cheese and a good ram; a sheep was often the reward of reaping—mutton being in season on St. John's day. Other festive occasions, such as Hocktide, Michaelmas or Martinmas, usually set apart for holding a law day or court leet, were followed by a feast called a leet-ale or scot-ale, where all persons present paid a fee or scot to furnish the feast. In a Glastonbury rental of the thirteenth century we find the scot-ale at the Deverells, Wiltshire, sometimes lasted for three days. On the last day the bachelors could drink freely without payment, as long as they could stand; if they sat down they must pay. . . . In the time of Henry III the ploughman and other officers at East Monckton, between Warminster and Shaftesbury, were allowed a ram for a feast on Midsummer Eve, when it was a custom to carry fire round the lord's corn.

A further typical example of food provided for 'boonwork' is that taken from the custumal of Preston in Sussex, and dating from the latter half of the thirteenth century which refers to 'two boonworks' on the manorial estates of the bishopric of Chichester which were held in fee by Simon de Perpont or Pierpoint. These 'boonworks' appear to consist partly of certain ploughings, one for wheat and one for barley, and we read that 'all who have oxen in the said ploughs shall come to the lord's manor for their dinner, if they wish, and shall have one day meat and the other fish, and a fair amount of ale. And all who come to the harvest boonwork shall have one day at dinner, soup, meat and cheese, and cheese at supper, and their fill of ale, and on the other soup, fish and cheese for dinner and for supper their fill of ale and cheese'.¹

Other interesting dietaries for 'boonwork' are quoted by Mr. Nathaniel Hone in *The Manor and Manorial Records*. The Abbot of Titchfield, 'according to the customary of the Hampshire manor where the abbey stood, had an extraordinary scale

¹ Sussex Archaeological Collection, Vol. LXX, pp. 89, 90.

Food of the Poor

of dietary for those tenants who worked at the lord's harvesting', says Mr. Hone. 'Those who worked one day a week for the whole day received at 3 o'clock a supply of food (*unum pastum*) consisting of bread with beer or cider, broth (potagium) and two sorts of flesh or fish, as well as a drink once after dinner. For supper the fortunate labourer also received a wheaten loaf weighing 40 oz. and two herrings or four pilchards or one mackerel. As such a meal seems to have been considered worth 4d.', continues Mr. Hone, 'this food allowance was certainly remarkably liberal. If three days' labour was the service to be rendered, the last of the three was recompensed in the same lavish manner, while on the two first days the repast was a loaf of barley bread, water to drink, and two kinds of fish, while the change in the supper consisted merely of the substitution of a 40 oz. barley loaf for one of wheat. When the customary tenants had to wash sheep or do a day's work on the meadows at the lord's will they received nothing except they had wheat bread and beer when they had finished; but the shearers had cheese in addition to bread and beer . . . the tenants when haymaking received bread and beer, with flesh and fish.'

An interesting instance of communal industrial feeding in a medieval town which was similar to 'boonwork' feeding in the country is recorded at Hythe, in 1412, when the townsmen sent for a Dutch engineer to make a new harbour. 'All the inhabitants were called out in turn to help at the "delveys" or diggings,' we are told, 'Sundays and weekdays alike the townsmen had to work, dining off bread and ale provided by the corporation for the diggers, and if they failed to appear they were fined 4d. a day.'¹

FOOD OF THE POOR

Though the general standard of feeding was naturally not so sumptuous for the peasant as for the lord, he was probably not so badly off, in the summer at least, as some people have at times suggested. It is generally believed that the peasant of the Middle Ages lived on 'black bread' made of maslin (or mixed corn), barley rye or bean flour, accompanied by milk, cheese, eggs and

¹ Mrs. Alice S. Green, *Town Life in the 15th Century*, Vol. I, p. 142.

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sometimes bacon or chicken. Chaucer, however, describes a 'poure Widewe . . . dwelling in a narwe cotage' in his *Nonnes Priest's Tale*—whose status was that of a very humble servant—who nevertheless owned 'three large sows . . . three kine, and eke a sheep' in addition to a 'cok' and 'seven hennes'. Sir Jack Drummond in his comprehensive and fascinating work, *The Englishman's Food*, tells us that 'The records of the village of Crawley, in Hampshire, show that it was common for tenants in medieval times to have a cow, a horse, pigs and as many as twenty-five sheep. . . . The cattle that were not working grazed during the spring and summer and were turned out on to the stubble after the harvest and gleaning. The pigs, long-snouted, razor-backed runts, were seldom specially fed unless they belonged to the manor where grain, skim milk or brewing residues might be available. Those owned by the villagers scavenged the by-ways and rooted in the village in charge of the village swineherd. Enormous numbers of poultry were kept and these, too, lived to a large extent on what they could pick up'. Great distress was caused by epidemics of cattle disease, one of which started in 1275 and lasted for twenty-five years. 'When the harvest failed', Sir Jack Drummond tells us, 'there was nothing for the peasant to do but kill off the livestock' and 'eke out his meals with the animals, herbs and roots of the countryside'. As the rich man hunted for venison in the forest which was brought home in triumph to the lordly table, the poor man poached in the woods and snared rabbits, hares and birds. Though the rich man was not above plundering the poor man when food was short, we find a number of cases of the reverse, of which a touching instance of dietary craving is illustrated in an extract from the proceedings of the manorial court rolls of a thirteenth-century baronial court in which the steward indicts 'Walter of the Moor' in these words:

'Walter of the Moor, thou art attached to answer in this court wherefore by night, and against the lords peace thou didst enter the lord's preserve and carried away all manner of fish at the lord's will. . . . How wilt thou acquit thyself or make amends? For know that were anyone to prosecute you, you stand in peril of life and limb, therefore be advised.'

Medieval Bread

To which Walter pathetically replies:

'Sir, my wife had lain abed a whole month and never eaten or drank anything she could relish, and for the craving to taste a perch she sent me to the bank of the pond to take one perch only, and that no other fish was taken or carried away, I am ready to do whatever thou doest award.'

But the steward is not impressed with this excuse and tells Walter he could have come by the perch 'in a more honest manner'. Whereupon 'the defendant then craves leave to impart and speaks thus: "Sir for God's sake do not take it ill of me if I tell you the truth" '. (Hone, p. 133.)

MEDIEVAL BREAD

On the constituents of bread in the Middle Ages, some interesting facts are given by Sir William Ashley in *The Bread of our Forefathers*. It is almost certain that pure wheaten bread is a comparatively recent innovation into English dietary. In the Middle Ages the most common material for making bread was a mixture of rye and wheat. Barley we find was grown chiefly for ale, of which enormous quantities were consumed by our ancestors at all meals and by both sexes indiscriminately. Sir Jack Drummond quotes 'The Maner and Rytes of the Walshmen' from *Polycronycon* as stating:

*'They ete brede colde and hote
Of barly and of ote
Brode cakes rounde and thynne*

Selde they ete brede of whete

*They have gruell to potage
And leke is kind to companage
Also butter mylke and chese
Y shape endlong and cornerwese
Such messes they ete snell (quickly)
And that maketh them drinke well
Methe (mead) and ale that hath myght
Thereon they spend day and night*

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When they drynke atte ale

They tell many a lewde tale.

General conclusions of students of the records seem to show that bread sold in the Middle Ages and Tudor times was of three kinds, white bread, brown bread, and black bread. The best quality 'white' bread was not the 'white' bread of to-day, from which so much of the nutritive value has been removed. It was made from wholemeal stone-ground flour sifted or 'bolted' through fine linen or woollen cloths to remove the coarse bran particles. This was known as 'manchet', 'painde-maigne', or 'painmain'. Brown bread could be wholly wheaten or made of rye. While black bread was also rye or maslin. (See above, p. 41.)

FAMINE

Like all primitive and therefore ill-organized and ill-regulated communities, medieval society was subject to an alternation of extremes, and in nothing is this so evident as in the food situation. Times of plenty alternated with times of famine, with appalling results as described by Professor Cunningham. 'Unless the statements of the chroniclers are grossly exaggerated', he writes, 'England suffered severely during the fifteenth century from two scourges . . . famine and pestilence. The population was dependent on the seasons for the food supply and though this might be plentiful in good years, there was often a general scarcity which was intensified in particular districts with a local famine. At such times men were driven to use acorns and roots for food, and had recourse to the flesh of dogs and horses: some cases of cannibalism are reported. It was only rarely that starving people were reduced to such extremities, but there is some reason to believe that they habitually used diseased and unwholesome food and that they were thus rendered a ready prey to the ravages of pestilence. In 1314, according to Stow's *Annals*: 'No flesh could be had, capons and geese could not be found, eggs were hard to come by, sheepe died of rot, swine were out of the way, a quarter of wheat beans and pease were sold for 20 shillings, a quarter of malte for a mark, a quarter of salt for

Catering in the Monasteries

35 shillings'. In the next year Stow tells us, 'Horseflesh was counted great delicates; the poor stole fatte dogges to eate; some (as it was saide) compelled through famine, in liddle places, did eate the flesh of their owne children, and some stole others which they devoured. . . .' In 'England in the fifteenth century', Denton states, 'The undrained neglected soil . . . the insufficient and unwholesome food, the abundance of stale fish which was eaten; the scanty variety of the vegetables which were consumed . . . predisposed the agricultural and town populations alike to typhoidal diseases and left them little chance of recovery when stricken down with pestilence.'¹

CATERING IN THE MONASTERIES

The monasteries, like the manors, were part of the industrial organization of medieval England, thus a historian of industrial catering cannot afford to overlook their contribution to mass feeding in the past. As we have seen and shall see, the ecclesiastic dignitaries were often themselves landlords, so that the monasteries are bound up with the whole of the feudal and manorial organization of society. They were the masters of villeins and serfs and the lords of tenants who owed them service. Monasteries were also centres of medieval craftsmanship and, in addition to wines, liqueurs and sweetmeats, produced books and all sorts of useful and artistic products.

'Inside the monasteries, classes . . . united on an equal footing in reclaiming the waste places and in laying the foundations of a new civilization', writes Professor Unwin of the early monastic development, and goes on to quote an instance from the life of St. Columba describing how Eosterwini, a thegn of King Egfrith's, at the age of twenty-four 'laid down his arms and, entering into the monastery at Wharmouth, threw himself cheerfully into the toil that he found going on about him. It was a pleasure to him to be employed along with the rest of the brethren', wrote the chronicler, 'in the winnowing and binding corn, in milking the cows and ewes, in working in the bakehouse, the garden and the kitchen, and in every other occupation in the monastery. . . . When he went out anywhere for

¹ Cunningham, *Rise of English Industry and Commerce*, Vol. I, p. 388.

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the furtherance of the business of the monastery, whenever he found brethren at work, it was his wont to join the mforthwith in their labour, whether by guiding the plough-handle, or working iron with the forge hammer, or wielding the winnowing fan.'

'The monastery of Bangor', continues Professor Unwin, 'was so large that it was divided into seven parts', none of which had less than 300 men, all of whom lived by the labour of their hands. 'St. Columba and his monks directed the pastoral and agricultural activities of Iona and the neighbouring isles: they were skilled and hardy seamen: their fisheries supplied them with food and oil.' Later Professor Unwin tells us that 'Westminster Abbey and St. Paul's held between them in the twelfth century nearly all the lands round London and the thirteen manors owned by the Chapter of St. Paul's, and farmed by the residentiary canons, furnished annually for the households of the clergy, 40,000 loaves of bread and 67,800 gallons of beer'¹.

In his survey of food and hospitality throughout the ages, Mr. Frederick Hackwood makes some interesting observations on the culinary methods of the monasteries.

'The refectories of the monasteries and the kitchens of the ecclesiastics', he says in his book, *Good Cheer*, 'were the strongholds of English medieval cookery.' Giraldus Cambrensis informs us that the table of the monks of Canterbury consisted of sixteen covers of the most costly dainties, dressed with the most exquisite skill. He relates that the monks of Winchester threw themselves at the feet of Henry II and complained with tears in their eyes that their abbot, the bishop of the diocese, had taken from them three of the usual number of their dishes. The King, however, thought they were still well off with ten, as he had to content himself with three dishes.

'In the old records', continues Hackwood, 'the chief official of the refectory department is described as "Magister Coquinae", and his duties seem to have been those of purveyor of provisions, while the cook who dressed the food is called "coquinarius". The officer charged with the care of entertaining strangers and seeing that they were provided with necessities was styled "hospitalarius".

¹ Unwin, G., *Studies in Economic History*, pp. 235-7.

Catering in the Monasteries

'The refectorers and cellarers accounts in a large monastic establishment show the regular occurrence of certain items which are interesting in throwing light on a number of practices. A certain provision of beans and oats goes to provide the Lenten "gruellum". The great festivals are marked by an improved quality of the bread, and the provision of a special treat in the shape of fried cakes. The monks were bled three times a year, and special provision was then made for dieting them properly. The performance of special duties was rewarded with special feeding, as the bathers who bathed the monks at Advent, and the laundry servants who got a monastic loaf when they washed the table cloths.

'The menial servants were under the management of the Refectionarius who was also charged with the care of the table-cloths, napkins, drinking vessels, and the entire table equipment.

'The list of servitors at a great monastery was of extraordinary length. The amount of manual labour engaged in a kitchen without mechanical appliances was necessarily large. The turning of the spit was effected by the direct application of hand labour.

'Among those whose duties have some connection with the table were the dapifer, or steward, the larderer, the abbot's cook, the monk's cook, the servant of the refectorer, the servant of the cellarer, the brewer, the servant of the garden, and sometimes of the vineyard, the baker, the heater of the bakehouse, the pig-keeper, the cowman, the miller, the granaryman; and all of them had fixed carrodies in the hall, or wages in the shape of allowances of ale, bread, a ram or two, or the fruits of certain acres.

'It was in these early English times that the custom known as carrodies grew up. A carrody was a grant of food (and sometimes of clothing) made in the way of charity or in part payment for services; a timid and temporising practice which ran up the expenditure of the royal, noble and monastic households very considerably.'

The entertainment of strangers both rich and poor was an important feature of monastic life.

The Middle Ages: Country

‘Perhaps that feature of monachism which most insured the favour of the people’, writes Hackwood, ‘was the constant hospitality maintained at these monasteries, and which extended its invitations to every class of society, from the nobleman to the beggar. In every monastery of importance a large room or guest-hall, surrounded with sleeping apartments, was appropriated for the reception of travellers, who were allowed to remain for two days and two nights as visitors, but were expected, if they continued after that time, and were in health, to conform to the rule of the house. Even in the reign of Henry VIII inns were not frequent, and where they did exist they presented a scene of dirt and wretchedness which was scarcely tolerable even in those days of comparative indifference to cleanliness. Erasmus, who had a national susceptibility on this point, has spoken very forcibly on the miseries of an English inn at that period. It was, therefore, a most acceptable resource to travellers of all ranks to enter within the secure and commodious precincts of a monastery, where they were sure of good fare and a comfortable lodging. Even the nobility when on their journeys, usually dined at one religious house and supped at another.’

The enormous banquets given by the monasteries became notorious.

‘When Ralph, Abbot of Canterbury, was installed in 1309, six thousand persons were entertained, and the dishes served up amounted to three thousand.’¹ Richard Winchelsey, Archbishop of Canterbury, provided daily victuals for five thousand poor people, and immense crowds of sick and infirm who were unable to attend his gate were supplied with necessities at their own houses.

A list of provisions for the feast of an archbishop’s enthronement in 1295 will convey an idea of the variety of medieval diet when flesh was excluded. It comprised 300 ling, 600 cod, 7 barrels of salt salmon at 28s. a barrel, 40 fresh salmon at 7s. each, 14 barrels of white herrings, 20 cades (i.e. ‘long hundreds’ of six score each) of red herrings, 5 barrels of salt sturgeon, 2 of salt eels, 600 fresh eels, 8,000 whelks, 100 pike, 400 tench, 100 carp,

¹ Hackwood, *op. cit.*

Catering in the Monasteries

800 bream, 2 barrels of salt lamprey, 80 large fresh lampreys (from the Severn), 1,400 small lampreys, 124 salt conger-eels, 200 large roach, besides seals and porpoise. There were olive oil, honey, mustard, vinegar, verjuice (an essential ingredient of medieval sauces), £33 worth of spices and comfits, bread, wafers, with wines and beer in proportion. The London cooks' wages, who were hired for the occasion, came to £23; the rewards given to heralds, trumpeters and mimes amounted to £20; painting the throne and making 'subtelties', huge erections of plaster and wax, of which the edible portion was extremely small if non-existent, cost £16. To calculate the actual cost in present-day values, these sums must be multiplied by about thirty.

Sometimes the monasteries got into debt and the abbot was ruined through extravagant expenditure on food and good living. Many monasteries raised loans in advance on the wool crop expected from their herds of sheep. Some even sold their wool crop fifteen years ahead. Miss Eileen Power in her *Medieval English Wool Trade*, quotes a pathetic lament of the one-time Abbot of Pipewell Abbey for his improvidence in these matters.

In the Cartulary of the Abbey after a list of loans including two wool contracts—written in strange handwriting—are the words: 'Be it remembered beloved brethren and reverend father, that through the aforesaid recognisances and by reason of seven years of sterility and murrain among the animals, the goods of the house of Pipewell were so completely used up that the residue thereof sufficed not for the slender sustenance of the aforesaid house of monks, but sometimes they sat down in the refectory for three or four days with only black bread and pottage and sometimes they bought their bread from market to market and all this they bore patiently. Hence it is I, the miserable sinner who once occupied the place of Abbot, counsel, beg and entreat and (as much as in me lies) warn that none henceforth fall into the hands of rascals, for the saying goes in French

*leger est a prendre
mes fort est a rendre.'*

Chapter II

THE MIDDLE AGES: TOWNS

FEEDING IN THE TOWNS

The first mention of a public cookhouse in England is to be found in Fitzstephen's vivid description of the City of London in the reign of Henry II, written in 1183. After describing how 'those that ply their several trades, the vendors of each several thing, the hirers out of their several sorts of labour are found every morning each in their separate quarters engaged upon his own peculiar task', Fitzstephen continues: 'Moreover there is in London, upon the river's bank, amid the wine that is sold from ships and wine cellars, a public cookshop. There daily according to the season, you may find viands, dishes, roast, fried and boiled, fish great and small, the coarser flesh for the poor, the more delicate for the rich, such as venison and birds both big and little. If friends weary with travel, should of a sudden come to any of the citizens, and it is not their pleasure to wait fasting till fresh food is bought and cooked and

*till servants bring
water for hands and bread*

they hasten to the river bank, and there all things desirable are ready to their hand. However great the infinitude of knights and foreigners that enter the city or are about to leave it, at whatever hour of day or night, that the former may not fast too long nor the latter depart without their dinner, they turn aside thither, if it so please them, and refresh themselves each after

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his own manner. Those who desire to fare delicately need not search to find sturgeon or guinea-fowls or Ionian Francolin, since all the dainties that are found there are set forth before their eyes. Now this is a public cookshop, appropriate to a city and pertaining to the art of civic life.'

An admirable picture of the methods of selling food in London throughout the Middle Ages is given in John Lydgate's ballad of 'London Lackpenny', written about 1450.

*Then to Westminster Gate I presently went,
When the sone was at hyghe pryme;
Cooques to me they tooke good entente,
And proffered me bread, with ale and wyne,
Rybbys of befe, both fat and ful fyne.
A fayre cloth they gan for me to sprede;
But wantyng money I myght not then speede:*

*Then unto London I did me hye,
Of all the land it beareth the pryse:
'Hot pescodes!' one began to crye,
Strabery ryfe, and cheryes in the ryse; (branch)
One bad me come nere and by some spyce,
Peper and safforne they gan me bede,
But for lack of mony I myght not spede.*

*Then went I forth by London Stone,
Throughout all Canwyke Streete,
Drapers mutch cloth me offred anone;
Then comes me one cryed 'Hot shepes fete';
One cryde 'Makerell', 'Rysters¹ grene', an other gan greete;
One bad me a hood to cover my head,
But for want of mony I myght not be spede.*

Stow speaks in the late sixteenth century of cookshops near the Eastcheap meat market. He says: 'The cooks cried hot ribs of beef roasted, pies well baked and other victuals. There was also a clattering of pewter pots, and harp and pipe and sawtric.'²

¹ Oysters.

² Hackwood, op. cit., p. 136.

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Pudding Lane and Pye Corner, where the great fire respectively began and ended, were no doubt named after the fare provided there. Pye Corner was the place where, as the old tale runs, 'pigges are al houres of the day on the stalls piping hot, and would crie (could they speak), "Come eat me, eat me!"' Roast pig was a famous city dainty and was regularly sold at Bartholomew Fair, a 'Bartlemy pig' being considered the *ne plus ultra* of savoury morsels.¹

FOOD AND HYGIENE IN MEDIEVAL LONDON

In 1378 we find prices laid down for various cooked dishes by an ordinance of the Cooks and Pasterers or Piebakers. These are:

'The best roast pig for 8d. Best roast goose 7d. Best roast capon 6d. Best roast hen 4d. Best roast pullet 2½d. Best roast rabbit 4d. Best roast river mallard 4½d. Best roast dunghill mallard 3½d. Best roast teal 2½d. Best roast snyte (or snipe) 1½d. Five roast larks 1½d. Best roast wodecock 2½d. Best roast partridge 3½d. Best roast plover 2½d. Best roast pheasant 13d. Best roast curlew 6½d. Three roast thrushes 2d. Ten roast finches 1d. Best roast heron 18d. Best roast bittern 20d. Three roast pigeons 2½d. Ten eggs 1d. For paste, fire and trouble upon a capon 1½d. For paste, fire and trouble upon a goose 2d. The best capon baked in pastry 8d. The best hen baked in pastry 5d. The best lamb roasted 7d.'²

An interesting ordinance of the same year forbids the selling of meat by candlelight to avoid deception of the customer, and it lays down the maximum price a butcher shall pay for a lamb as 6d.

Memorials of London and London Life, edited by H. T. Riley in 1868, contains a wealth of documents which throw vivid light on the manners and customs of Londoners between 1276 and 1419 with regard to food and hygiene. We find several ordinances laying down severe methods of dealing with swine found wandering in the city streets. In 1292 certain men are appointed to slaughter such swine while an earlier edict directs that wan-

¹ Hackwood, *op. cit.*, p. 136.

² H. T. Riley, *Memorials of London and London Life*.

Food and Hygiene in Medieval London

dering swine shall be killed by anyone who come across them and redeemed by the owners from the killer at 4d. each. In 1297 pigstyes are ordered to be removed from the streets.

Throughout these documents are indictments of bakers for selling bread deficient in weight for which the usual punishment was to be put in the pillory or drawn on a hurdle with the offending loaf hung from the victim's neck. The most ingenious method of cheating over bread, however, was that invented by one John Brid, who, according to the indictment dated 1327, did 'skilfully and artfully cause a certain hole to be made upon a table of his called a "moldingborde" pertaining to the bakehouse, after the manner of a mousetrap in which mice are caught, there being certain wicket warily provided for opening and closing such a hole. And when his neighbours and others, who were wont to bake their bread at his oven, came with their dough of material for making bread, the said John used to put such dough or other material upon the said table called a "moldingborde" as aforesaid, and over the hole before mentioned, for the purpose of making loaves therefrom, for baking; and such dough of material being placed upon the table aforesaid, the same John had one of his household, ready provided for the same, sitting in secret beneath such table, which servant of his so seated beneath the hole, and carefully opening it, piecemeal and bit by bit craftily withdrew some of the dough aforesaid, frequently collecting great quantities from such dough, falsely, wickedly and maliciously; to the great loss of all his neighbours living near and of others who had come with such dough to bake, and to the scandal and disgrace of the whole City, and in especial of the Mayor and Bailiffs for the safe keeping of the assizes of the City assigned.'

On the discovery of John Brid's crime, it appears, several similar deceptions came to light and two 'bakeresses' were among those at whose bakeries holes were discovered in the "moldingbordes" with the tell-tale dough beneath them. In what is generally considered a barbarous age, the malefactors got off somewhat lightly with a day in the pillory and lumps of dough hanging from their necks. The story is interesting in that it shows that in addition to supplying bread to the populace

The Middle Ages: Towns

baked from their own flour, bakers also undertook to bake loaves for their customers. It also throws light on the 'assize' of bread and the responsibility of the City Corporation to protect the purchaser from fraud, a function which was exercised chiefly through the instrument of the Guilds who had powers of search and examination of wares to ensure they complied with the standards laid down. *Caveat emptor* was a slogan unknown in the Middle Ages. It was the responsibility of the manufacturers and of the community itself to see that the consumer was not cheated. A fraud was looked upon as an insult to the Mayor and Corporation and a 'scandal and a disgrace to the whole City'. Nowhere is this better seen than in the measures taken against the sale of putrid meat and fish. In 1319 we find 'William Sperlyng of West Hamme' convicted of trying to sell two beef carcasses which are 'putrid and poisonous', and 'bodies that have died of disease'. He is ordered to be put in the pillory and the offending carcasses are to be burnt there beneath him. An interesting sidelight on the diet of Londoners in the fourteenth century is given in an ordinance for the destruction of an illegal kind of net called a 'kidel' used for fishing in the Thames near 'Wolwiche', on the plea that they destroyed 'small fish and salmon'. It would be interesting to know how long it is since salmon were caught in the Thames. Summary methods of dealing with those who sold bad meat and drink are exhibited in the case of John Penrose, taverner of Eastcheap who, convicted of selling 'red wine . . . unsound and unwholesome to man, in deceit of the common people and in contempt of our Lord the King, and to the shameful disgrace of the officers of the City', was ordered to drink a draft of his own bad wine and have the remainder poured over his head.

The pillory was often given at this time for 'enhancing' prices of wheat or other foodstuffs. That is to say, men who tried to sell food above the market price were severely punished. In 1363 we find a most interesting table of food prices, among which it is enacted that 'the best goose shall be sold for 6d. The best sucking pig for 8d. The best capon 6d. A hen 4d. The best rabbit 4d. A spande (shoulder) of mutton 2½d. A brusket of roast mutton 2½d. The best carcase of mutton 2s. The best loigne

Food and Hygiene in Medieval London

of beef 5d. The best loigne of pork 3d.'. A victualler was not allowed to 'conceal his victuals which he has to sell' on pain of considerable penalties, and if he withheld any victuals until they became 'corrupt or stinking' his punishment was heavy.

Reverting to the fourteenth century another interesting document of the year 1345 describes regulations for the sale of meat and fish in the City of London. It appears from this document that 'the king's highway between the places called the "Stokkes" and the Conduit, in the Warde of Chepe, in London, was so occupied on flesh days by butchers and poulterers with their wares for sale, and on fish days by fishmongers with their wares, that persons going that way and returning could not pass through without great hindrance'. After a conference of 'the Mayor, Aldermen, Sheriff and commoners then present', it was agreed that the poulterers from henceforth 'should sell their poultry in their homes and shops adjoining and not in the king's highway, on pain of forfeiting their wares so exposed for sale in the highway; and that in future the butchers should sell their meat on flesh day within the enclosed place called the "Stokkes" and not in the king's highway and that for the future fishmongers should sell their fish on fishdays within the same enclosure'.

With regard to 'fish days' it is interesting to note that an Act of Edward VI enjoined 'such abstinence (from meat) which hath been used in this realm' upon Fridays, Saturdays and in Lent; 'considering that due and godly abstinence is a means to virtue and to subdue men's bodies to their soul and spirit, and considering also specially that fishers, and men using the trade of living by fishing in the sea, may thereby the rather be set on work, and that by eating of fish much flesh shall be saved and increased'.

By a later Act of 1564 fish days were increased to Wednesdays, Fridays and Saturdays, and were enforced 'for the increase of fishermen and mariners, and repairing of port towns, and navigation' and were 'expressly dissociated from any religious significance', and designed also partly to keep down the price of meat and preserve young cattle.¹

¹ Lipson, *Economic History*, Vol. III, p. 118.

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It was also found that 'the dock at Dovvegate has become so corrupted by dung and other filth thrown into the same dock, that the carters who carry water from the Thames at the same dock to different places in the City, are no longer able to serve the commonalty: to the great loss and disparagement of the same commonalty'.

WATER SUPPLY

In fact the water supply of London was even then becoming a matter of some concern. Charitable gentlemen used to build 'Conduits' to carry water into the City from outside. Hence the continued use of this word in the present-day street names of London. In 1345, brewers are strictly enjoined not to waste the water of the conduit, which is described as having been built 'of old . . . in the midst of the City, that so the rich and middling persons therein might there have water for preparing their food, and the poor for their drink'. The ordinance enacts that since 'the water aforesaid was so wasted by the brewers, and persons keeping brewhouses, and making malt in these modern times it will no longer suffice for the rich and middling, or for the poor, to the common loss of the whole community'. Penalties are to be inflicted on brewers who continue to use the water in their brewing and also on fishmongers 'who wash their fish therewith'.

MEDIEVAL INDUSTRY IN THE TOWNS

To understand the industrial catering problems of the medieval town it is necessary to know something about the organization of its industry. One is apt to forget sometimes that what are generally called the 'Middle Ages' extended over five centuries, the eleventh to the end of the fifteenth, a period longer than that which divides us from the reign of Henry VIII, and that naturally fundamental changes took place during such a time. It is not the purpose of this book to describe such changes in detail, and for the sake of brevity the Middle Ages will be taken to mean roughly those five centuries which in England preceded the era of the Tudors. The characteristic which differentiates medieval industry from the industry of later periods is

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mainly that it was carried out under a 'household' system, that is to say, the craftsman or manufacturer lived in his own home employing apprentices and journeymen or day-labourers (from the French *journée*). Later this developed into the 'domestic' system in which craftsmen, such as weavers, worked for a 'capitalist' who supplied them with material which they worked into a finished or semi-finished product on a loom or some other simple industrial machine. In *Life and Work in Mediaeval Europe*, translated by Miss Eileen Power, M. Boissonade writes:

'The unmarried workmen and apprentices were usually boarded and lodged by their master. . . . The material life of the working classes of this period (fourteenth century) seems to have been comfortable. It was simple and usually removed from the temptations of luxury. They were ordinarily content with simple food—vegetables, beans, dough-cakes, bread and soup and a seasonable proportion of meat. They reserved their great carouses and their big bumpers of wine and beer for feastdays and meetings. They were not very particular about housing. In France they crowded together in houses of wood or clay, with pointed gables and slate-covered fronts, the projecting upper stories of which overhung the road and almost met one another across it. On the ground floor the masters had their workshops, serving at the same time as work rooms and shops. Usually they lived together with other members of their trade in the same quarter and each road bore the name of a corporation. There, during the hours of work and sale, the customers moved, all along the dark and narrow alleys, among the stalls protected by penthouses, above which hung creaking sign-boards. Pedestrians, horses and carts, jostled domestic animals, especially pigs, running about amid heaps of filth. The cries of each trade might then be heard in their original zest, from that of the taverner or the cook with sauces to sell to that of the basket mender and the old clothes man.

'Families lived often in the most primitive simplicity in a few rooms barely furnished with chests, tables and various utensils. The clothing of the workmen and small master was made of strong woollen or linen cloth, and cost him little.'

As a vivid summary of conditions of this period I quote from

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The Social and Industrial History of England by Dr. Tickner, who gives a colourful description of the life of the medieval craftsman. He imagines a tour through a medieval town of the fourteenth century. 'As we move along', he writes, 'we pass the houses of the craftsmen whom we can see busy at their work. Men of the same craft live together in the same street. This is very helpful to the wardens of the craft guilds, for their supervision is rendered easier and more effective. Here is Bowyer's Row, there is Candlewick Street, farther on are Tanner's Lane and Glover Street. The houses here are built with the gable end toward the street, and so have but a narrow frontage. The ground floor is often raised a foot or two above the level of the street, and is approached by stone steps running along the wall. Here the craftsman and his journeymen and apprentices are at work, and round the room are some of the finished or partly finished products of their craft. The large window shutter has been let down and forms a counter on which some of the goods are exposed for sale. But much of the work is done to order, and the customer in many cases supplies his own material. Thus there is no great quantity of goods on show, though the craftsman may have some completed work by him, which he is intending to take to market or fair to be sold. Under his shop is a large cellar, to which access is obtained from the street. It serves him as a very convenient storehouse for the materials of his trade. His large living room is either at the back of his shop or else above it; the apprentices and journeymen may not only work in the shop but may have to sleep in it, too. At the back of the house is his garden, and the well which provides water for the family. There is no public water supply, and we may meet with water-sellers calling out their ware before we leave the town.

'Notice how large a part the hand plays in the work that is done. There are few machines. This work is really handicraft, and the craftsman is evidently proud of it and greatly interested in it, for he directs our attention to some good specimens, and points out their excellence. There is something artistic about his products, and there is plenty of evidence of originality and skill. Each man, too, is making an entire article himself, or

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nearly so; division of labour has not yet reached the stage in which one man is constantly engaged in making only a small portion of a whole. At any time the wardens of the craftsmen's gild may visit the house. When they come they inspect the material the craftsman is using, examine the goods he has made or is making, and inquire into the hours of labour of the workers and the prices at which the articles are sold. All these things are under the control of the gild, and it is their duty to see that gild regulations are carried out in all respects.

'The hours of labour are long. They last generally from sunrise to sunset, with intervals of half an hour for breakfast, an hour and a half towards midday for dinner and sleep, and half an hour in the afternoon for refreshments. But in the town as in the village there are frequent holidays and other forms of relief from work. An artisan can earn as much as sixpence a day, but holidays cause of much loss of this that his usual yearly wage is only about four pounds. The real purchasing power of this money may be seen from the fact that in London in 1313 one could buy a fat ox for twenty-four shillings, a sheep for twenty pence, a goose for twopence halfpenny, two chickens, or three pigeons, or twenty-four eggs for a penny.

'But we must hurry along to the shops of the mercers, the pepperers or grocers, and the goldsmiths. Here are finer shops than those we saw before, for these men are more concerned with selling than with making. The ground floor forms the shop, and the shop fronts are built under the projecting penthouses of the upper floors. Many of them are little more than covered sheds projecting in front of the house, with the wares more or less exposed to the weather on benches placed across the window space. All have their signs to tell us what the occupants sell, and the law has ordained that, in the interests of horsemen passing along the streets, the projecting penthouses and shop signs must be at least 9 feet high. The mercer can supply us with haberdashery, combs, mirrors, knives, toys, spices, ointments, and drugs; the goldsmiths show us metal flagons, cups, dishes, girdles, mirrors, purses, and knives; at the pepperers we get pepper and spices. The shopkeepers are busy to-day. Some are trying to display their wares to best advantage, others are bar-

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gaining with customers, and the noisy apprentices with their 'What do ye lack? What do ye lack?' stand at the doors, watching the windows and trying to persuade folk to buy the goods displayed in them. These houses are the largest we have seen as yet. At the side a staircase leads to the large sleeping apartment which the upper room provides. At the back of the house is a large hall or living room and probably a kitchen also. Here, too, is a third storey, and a projecting crane shows that it is used like the cellar as a storehouse for goods.

'Some of the houses are imposing mansions with extended frontage and large halls, but there are not many of these in a single town. The next century will see much rebuilding and enlarging in this direction. These largest houses are the homes of the most important merchants, such as Sir Richard Whittington, mercer of London; or the De la Poles of Hull; or Henry Picard, vintner, Lord Mayor of London in 1357, and the entertainer in 1363 of the kings of England, France, Scotland, and Cyprus at a feast held in his house. Such merchants have among their apprentices the younger sons of good county families who are seeking a fortune in trade. Men like these are beginning to be traders on a large and important scale, merchant princes who will rise to positions of great importance in the government of the town and the nation, and will ultimately join the ranks of the nobility and country gentry.

'In the best of the houses the party walls are built of stone to the height of 16 feet, and only the upper storey is of wood. This better building is useful against fire, one of the greatest dangers of the medieval town. In London special precautions are taken against fire. The citizens are encouraged to use stone; baking and brewing at night are carefully regulated; a tubful of water is kept before each house; and in every ward, the alderman is provided with a proper hook and cord for pulling down houses on fire.' He then goes on to describe the market where 'Some of the merchants have booths or wooden sheds in which to display their wares, others have stalls; others, again, have spread their goods upon the ground. But all have to pay a toll for their stand; though the members of the "gild merchant" will get their stand free of toll if sellers of the same kinds of goods collect to-

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gether in one part of the market. In London the great market of Chepe occupied the open space to the east of St. Paul's churchyard; and the names of the streets branching from this highway, Bread Street, Milk Street, Honey Lane, Wood Street, Ironmonger Lane, Old Change, and so on, remind us of the lines of booths and stalls.

‘Another important feature of the market is the public weighing machine. This machine, which is probably in the form of a weighing beam or steelyard, may even be affixed to the wall of the church. It is the standard weight of the town and whatever weights the townspeople use, whether metal weights or large stones, must agree with it, as must their measures with the official yard measure and bushel kept with it. It is one of the duties of the mayor to see that the weights and measures used in the town are regularly tested and adjusted.

‘The mayor, too, had important duties connected with the sale of food. The price of victuals was regulated by Acts of Parliament, and the mayor had to see that these Acts were enforced. Assizes of Bread and Ale attempted to fix a scale of prices at which these commodities should be sold and the quality of bread was to vary with the price of wheat, of ale with the price of barley and malt. When corn was dearer the farthing loaf weighed less than when corn was cheaper, the change being made in the weight of the loaf and not in its price. Any attempts at adulteration or the production of inferior quality were heavily punished. A baker who gave short weight was drawn through the streets on a hurdle with his loaves tied round his neck. The seller of bad ale or wine might be compelled to drink a part of it, and the remainder was then poured over him. Many of the alehouses were merely basement cellars and their keepers generally women. Each ale-wife brewed her own ale. The official ale-taster or ale-conner came to test it, and if it were of inferior quality she could be fined or placed in the pillory. The usual price of ale was from $\frac{3}{4}$ d. to $1\frac{1}{2}$ d. per gallon for the best, and $\frac{1}{2}$ d. to 1d. per gallon for the second quality. Wine taverns were always separate establishments from ale-houses. Sometimes the mayor, especially if he were associated by trade with the sale of foodstuffs, did not perform his duties honestly and

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the people suffered, and there were often feuds in the towns between the victualling gilds and the people generally.

‘There are plenty of cook-shops, too, at which we may buy food, cooked meat or fish or fowls; in fact, there is every opportunity for the townspeople to buy for home use if they happen to receive an unexpected visitor. Here, again, there are careful regulations; butchers are not allowed to sell cooked meats, nor is it possible to buy wine in the cook-shops. But these cook-shops are now being replaced by hostelries where guests may be lodged and supplied with food and wine. Fish is an important article of diet, and there are two distinct gilds of fishmongers—the salt fishmongers who sell the fresh fish, and the stock fishmongers who trade in the dried varieties.’

WORK, WAGES AND MEALTIMES

To gain an idea of wage rates and conditions of work in the fourteenth century and later we can refer to a bill for house repairs in 1359 in which the day wages of various builders’ labourers are specifically mentioned. Thus a tiler is paid 7d. per day, his man is paid 5d., and for two days’ work the men are allowed 2d. drink money. A carpenter’s wages are also 7d. a day and his man’s 5d., though on another occasion they are 7½d., while a tiler and his man are paid 13½d. for one day’s work. To give an idea of the comparative value of money in terms of other items than food, we find an inventory of goods in 1356, in which one wooden bedstead is valued at 2s., 5 carpets at 7s., another wooden bedstead (presumably more elaborate than the first) 18s., 3 tablecloths and one towel 21d.

In 1350 an ordinance was made limiting wages of a number of craftsmen including masons, carpenters, ‘sawiers’, plasterers to 6d. in the summer and 5d. in the winter ‘without victuals’. Tilers are to take 5½d. a day in summer and 4½d. in winter, while labourers take 3½d. in summer and 3d. in winter. Tiles we find cost 5d. a thousand.

Mealtimes in the building trade at Beverly by the end of the fifteenth century, quoted by L. F. Salzmann in *Mediaeval English Industries*, show that work began in summer (from Easter to 15 August) at 4 a.m., and continued till 7 p.m.; at 6 a.m.

Work, Wages and Mealtimes

there was a quarter of an hour's interval for refreshment, at 8 a.m. half an hour for breakfast, at 11 a.m. an hour and a half to dine and sleep, and at 3 p.m. half an hour for further refreshment. During the winter months men worked from dawn to dusk, with half an hour for breakfast at 9 o'clock, an hour for dinner at noon, and quarter of an hour interval at 3 p.m. Similar hours were laid down by Parliament in 1496.

Writing of the fifteenth century Professor Thorold Rogers states: 'The wages of the artisan were generally and through the year about 6d. a day. Those of the agricultural labourer were 4d.' In London, he says, wages were from 25 to 30 per cent higher than rates paid in other places. The day was one of eight hours. 'Sometimes the labourer is paid as though he were fed, and a further allowance for his board is given him, this probably being paid to some person who has contracted to feed him at a rate. Sometimes the food is given in, and the labourer's wages are paid at the full average. This is especially the case when the workman is hired by opulent corporations and on their premises. There was always a servants' table in these establishments, and the workman is bidden to it without stint or grudging. I find, for example, at some of the Oxford colleges that ordinary rates are paid, and the workman is fed into the bargain. Food was so abundant and cheap that it was no great matter to throw it in with wages.

'The agricultural labourer gets 4d. a day for his work, but in harvest time 6d. . . . The full price of a labourer's board was a shilling a week, often considerably less: his wages were twice or three times the cost of his maintenance under contract. In 1467 two girls are hired to work and are paid 2d. a day. They are also boarded and this is put at twopence a day more. In the same year at Selbourne Priory in Hampshire, the board of men is put at 2d., of women at 1½d.'

Comparing these rates with the price of food, Thorold Rogers tells us that from 1401 to 1540 the price of wheat averages 5s. 11½d. a quarter, a penny more than the average for the period 1260 to 1400. He speaks frequently of the extraordinary cheapness of provisions during the whole of these two periods and suggests that at no time in history have labourers' wages

The Middle Ages: Towns

been so high in terms of what can be bought with them as in the fifteenth century.

In order to compare the limits of wages over two and a half centuries we find that in 1586 a Statute of Artificers laid down the following wages for 'the best and most skilful workmen, journeymen, and hired servants of any of the companies hereunder named.

Cloth workers by the yere with meat and drinke	v li	} £5
Fullers by the yere with meat and drinke	v li	
Sheremen by the yere with meat and drinke	v li	
Diers by the yere with meate and drinke	vili xiiis	iiijd
Taylors hosiers by the yere with meate and drinke		iiijli
Shoemakers by the yere with meat and drinke		iiijli
Pewterers by the yere with meat and drinke	iiijli	vjs viijd
Whitebakers by the yere with meat and drinke	iiijli	xiijs iiijd
Brewers by the yere with meat and drinke		xli
The underbrewer by the yere with meat and drinke, etc.		vjli
Goldsmiths by the yere with meat and drinke		viiijli
by the week		iijs iiijd
by the day		xiiid
Without meat and drinke by the week vjs, by the day		xiiid
Plumbers by the yere with meat and drinke	iiijli	vjs viijd
by the week		iijs iiijd
by the day		xiiid
Without meat and drinke by the week vjs, by the day		xiiid.

It will be seen from the last few items quoted what the estimated cost was for 'meat and drink' per day and week.

BEGINNING OF THE FACTORY SYSTEM

Although at this time industry was not organized on a 'factory' basis as we know it to-day, nevertheless even in the Middle Ages we find vestiges of the factory system growing up, and the factory system itself was a natural development of the domestic system once the strong restrictions on the size of the industrial unit laid down by the craft guilds were removed. These craft guilds as we have seen were bodies formed by the craftsmen themselves to regulate their own trade in every particular. They laid down the length of years for apprenticeship, the standard of workmanship required, the pay and standard of life of the employee, apprentice and journeyman. They protected consumer

Beginning of the Factory System

and producer alike and were an integral part of municipal life, interlocking firmly with the municipal government itself. One of the most stringent rules laid down by the craft guilds was for a long time concerned with the limitation of the number of apprentices and journeymen which could be employed by one master. There were very good reasons for these limitations from the point of view of medieval economic theory and departure from them eventually caused, as we shall see, the most appalling abuses. The limitation of apprentices however was aimed chiefly at keeping the crafts exclusive and efficient and at ensuring that neither the labour market became flooded with too many qualified journeymen nor that the market for the product of the craft became flooded by too many wares. Mass production was severely frowned upon by medieval legislators: and consequently any machinery which was invented to do the work of man was severely put down.

Whereas the industrial catering problem of the countryside therefore was a mass problem, similar in size to our industrial catering problem to-day, the industrial catering problem of the medieval townsman was on the whole a more domestic problem. A master craftsman was responsible for the bed and board of his journeymen and apprentices, possibly of five or six workmen, for whose general behaviour he was also responsible. Generally speaking there was no class distinction in medieval industry between employer and employee. Every apprentice was potentially a master craftsman, and every master had, by edict of his craft guild, been forced to pass through the stages of apprentice and journeyman. In Dekker's play, *The Shoemaker's Holiday*, Simon Eyre, the eccentric master shoemaker who eventually becomes Lord Mayor of London, quite naturally tells his wife to get breakfast for his journeymen Hodge and Firk.

The general understanding that workers were paid in food is well illustrated by the fact that even as late as 1577 when the journeymen complained of lack of employment, they were told by the Court of Assistants that 'the greatest fault and lett was in themselves for neglecting of their dueties in their duetifull service, both in comynge to work, and in doinge their work *for their*

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meat and drinke. Therefore they were moved if they woulde be contented to come to their worke at such time as they ought to do by the ordynance of this house, and to do their work justly and truly as they ought to do, and to be content with such reasonable fare, so it be sweete and holdsome for man's bodie, as the householders shall provide for them.'

The masters of the cappers at Coventry were obliged to go once a year to all the shops of their craft and call the apprentices before them, and if any apprentice complained three times against his Master for insufficient 'finding' they had power to take him away and put him with another master.¹

A fifteenth-century indenture for apprenticeship states: 'This indenture made the XVIII day of September the year of the reign of king Edward iiiith the XXth between John Gare of Saint Mary Cray in the county of Kent, cordwainer on the oon partie and Walter Byse, son of John Byse sumtyme of Wimelton in the same county, fuller on the other partie. Witnesseth that the saide Walter hath covenanted with the saide John Gare for the time of viii yeres, and that the saide John Gare shall find the saide Walter mete and drink and clothing during the saide time . . . also the saide John Gare shall teche the saide Walter his craft, as he may and can, and also the saide John Gare shall give him the first yere of the saide viii yeres iiid in money, and the second yere vid and so after the rate of iiid to an yere and the last yere of the saide viii yeres the saide John Gare shall give unto the said Walter X shillings of money. And the saide Walter shall well and truly kepe his occupacyon, and do such things as the saide John shall bid him do, as unto the saide Walter shall be lawful and lefull, and the saide Walter shall be none ale goer neyther to no regeld nor sporte during the saide viii yeres without the licence of the saide John . . .'

'On the whole . . . the household of the thirteenth century was organized on the basis of natural economy: the requirements of the establishment were reckoned and the generosity of the proprietor found expression, not in money but in food,' says

¹ L. F. Salzmann, *Mediaeval English Industries*, p. 342.

Guild Feasts

Dr. Cunningham in *The Growth of English Industry and Commerce*.

The contrast between the fare of fourteenth-century English and Dutch artisans is shown by Dr. Fuller in his *Church History of Britain*. 'Emissaries were sent', Fuller tells us, to tempt the Dutch craftsmen over to England, 'who bemoaned the slavishness of these poor servants whom their masters used rather like heathen than Christian; yea rather like horses than men; early up and late in bed, and all day hard work, and harder fare (a few herrings and mouldy cheese), and all to enrich the churls their masters, without any profit to themselves. But how happy should they be if they would but come into England bringing their mistery with them, which should provide their welcome in all places. Here they should feed on beef and mutton, till nothing but their fatness should stint their stomachs. . . .'

GUILD FEASTS

The nearest analogy to industrial catering as we know it to-day in the medieval township, was the common habit of feasting among the guildsmen for which excuses were found on every holiday and Saint's day. These feasts were communal affairs to which everybody contributed. Later, however, feasts were exacted from new recruits aspiring to become members of guilds, which in the fifteenth century lost much of their character as wise and kindly regulating bodies and became exclusive, tyrannical capitalistic organizations. In *Life in an Old English Town* by M. Dormer Harris, we find the following statement referring to Coventry:

'Few pleasures appealed to the medieval citizen so strongly as that of dining well; and besides . . . peace promoting drinkings (to heal quarrels between disputants) there were many occasions whereon members of guilds and crafts met together to feast and do their best to justify the reputation, which still clings to city folk and aldermen, of loving good cheer. The meals of the Middle Ages were long and heavy. The highly flavoured cookery, with its strange mixture of meat and sweets—fowls stuffed with currants was a favourite dish—would appear barbarous to modern epicures; but such as it was vast preparations and money were lavished upon it. The members of

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each craft fellowship met once a year to hold a feast, while the brethren of the Trinity Guild celebrated the Assumption and St. Peter's Eve by a banquet, and probably also the festival for the Decollation of St. John. The Corpus Christi had a "Lenten" dinner, a "goose" dinner in August, and a "venison" one in October, and in 1492 they spent £26 os. 4d. on their feasts, a sum only 13s. less than the annual stipend due to the five priests supported by the guild. But the record of common feasting is not yet exhausted. The members of the Corpus Christi fraternity met together at a breakfast on the morning of the festival of the Body of Christ, and all the crafts supped on cakes and ale on the great processional nights. One dozen spiced cakes, three dozen white cakes, "a Seysterne" and a half of ale with "comfets", and pound of "marmalet" were ordered for the carpenters merrymaking on Midsummer Eve, 1534. Nor were the journeymen forgotten on these joyous evenings; they partook of plainer fare—bread and ale—at their master's expense.' That the guild feast was not, however, confined to the towns is made clear by Thorold Rogers who states:

'The guilds which existed in the towns were also found in the country villages . . . vestiges of their halls remained long in small villages, these halls being devoted to the business and occasional feasts of the society. They were convenient instruments for charity before the establishment of the poor law, and they employed no inconsiderable part of their revenues collected from subscriptions and from lands and tenements, in relieving the indigent and treating poor strangers hospitality. Blomefield speaking of their feasts, says: "But as the poor of the parish always were partakers with them, I much question whether their revenues were not better spent then than they have been since they were rapaciously seized from the parishes to which they of right belonged".'¹ Other pleasant feasting customs are described by Stow in his *Survey of London*.

'On the vigils of festivale day and on the same festivale dayes in the evenings', Stow tells us, 'after the sun setting, there were usually made bone-fires in the streets, every man bestowing wood or labour towards them. The wealthier sort also before

¹ Thorold Rogers, *Six Centuries of Work and Wages in England*, p. 417.

Guild Feasts

their doores, neere to the said Bone-fires, would set out tables on the vigils, furnished with sweete bread and good drinke, and on the Festivale days with meat and drinkes plentifully, whereunto they would invite their neighbours and passengers also to sit, and be merry with them. . . .’

Salzmann tells us in his *Mediaeval English Industries*: ‘Gild feasts . . . became so elaborate and costly that many of the unfortunate members chosen as “feastmakers” were ruined, and in 1495 orders were given at Norwich that the wardens alone should be feastmakers and that they should provide one supper and one dinner on the same day, and no more, and those should be at the common expense of the gild. These orders had to be repeated in 1531, and it is rather interesting to read that in 1547 the dishes which had to be provided by the cordwainers’ feastmakers were “frumenty, goose, vell, custard, pig, lamb and tarte. . . . At soper—cold sute, hot sute, moten, douset, and tarte”.’ Mr. Salzmann suggests ‘sute probably means “course”, but in the erratic spelling of the day it might easily stand for “soup”. “Moten” is, of course, mutton, while “douset” is apparently a sweetmeat composed of cream, eggs and sugar’.

Chapter III

THE RISE OF CAPITALISTIC ORGANIZATIONS

THE DECLINE OF MEDIEVAL CRAFTS

There is plenty of evidence that the extravagant feasts of the guilds became towards the end of the fifteenth century such an imposition that only the wealthy could afford them. The guilds also ceased to be democratic organizations, while the crafts they formerly controlled became subject to disputes between employers and employees exhibiting all the characteristics of 'class war'. The employees in fact founded their own guilds which were something in the nature of trade unions. The masters naturally resented this and did their best to suppress them. Sometimes these guilds were mere eating and drinking clubs, the effect of whose revels made the workmen useless for a whole day afterwards, according to the masters. Sometimes they were set up in opposition to the exclusive and capitalistic practices of the craft guilds and livery companies. They were a sign of the development of a 'proletariat', a rootless and property-less class dependent for its living solely on its labour. The apprentice could no longer look forward to mastership as the natural result of his labours. Having served his apprenticeship long enough to become a journeyman, he found himself excluded from mastership by the guild exactions which were too high for him to afford.

Thus we have the seeds of the factory system in which the rich masters, by reason of their power and capital, are able to alter

The Wool Trade

and annul the guild restrictions on numbers of journeymen and apprentices. Apprentices and journeymen employed by one master begin to increase in number, until we find several hundred being employed by the wealthy and powerful clothiers of the fifteenth and sixteenth centuries.

It is true that owing to the break up of the guilds, as the representatives of all classes involved in industry including the consumer, the State took over the control of industry about this time and laid down a number of ordinances for the regulation of wages, hours, the size of the industrial unit and so forth. These ordinances seem, however, to have been generally ineffective. The growing tide of capitalistic development was too strong to be held in leash, and after endless repetitions of the same act, generally prefaced by pathetic complaints that the last one had proved ineffective, they were eventually repealed in the reign of Elizabeth and, later, as an admission that it was impossible to cork up the new wine of economic progress into the old bottles of medieval economic doctrine.

The change in the size of the industrial unit naturally changed the problem of industrial feeding. In the heyday of the craft-guild organization, round about the fourteenth century, the master not only fed, clothed and housed his apprentice and fed and housed his journeyman, if he were unmarried, but, as we have seen, was answerable to the guild for feeding and housing them adequately. If it were proved that he did not maintain a high enough standard of board the guild had power to punish the master and deprive him of his apprentices.¹

In the process of transition from household to factory system we find a development which came to be known as the domestic system. This system flourished in the wool and clothmaking trade towards the end of the fifteenth century.

THE WOOL TRADE

In the fourteenth century Edward III had encouraged the manufacture of cloth by prohibiting the export of English wool, thus lowering its price sufficiently to enable the English cloth workers to make substantial profits; he insisted that all English-

¹ See A. Abram, *Social England in the Fifteenth Century*, p. 122.

The Rise of Capitalistic Organizations

men should wear native cloth and forbade the importation of foreign cloth.

A study of the famous family of Paycockes of Coggeshall, Sussex, or the Springs of Lavenham, shows the master clothier as a centralizing and co-ordinating factor for a number of industrial functions, each of which was carried out in the operatives' own homes. Thus the wool would be carded in one set of homes, spun in another, woven in another and so forth. This integration of the domestic system lasted right up to the industrial revolution. The master clothier became the capitalist employer, but not the factory owner. There were even in the fifteenth century, however, incipient signs of factories. Machinery was beginning to appear but, generally, it was heavily opposed.

Nevertheless, the forces of economic progress were too strong for medieval legislation, and in the late fifteenth and early sixteenth century we already find the factory system of later ages going at full blast, in the clothing industry at least. There is a seventeenth century rhymed description of the household of John Winchcombe of Newbury, known as 'Jack of Newberry', who lived in the reign of Henry VIII, which shows him as employing over 1,000 hands. A number of these were girls and women.

*Within one room being large and long
There stood two hundred looms full strong:
Two hundred men the truth is so
Wrought in these looms all in a row.
By everyone a pretty boy,
Sate making quills with mickle joy.
An in another place hard by
An hundred women merrily,
Were carding hard with joyful cheer,
Who singing sate with voices cleare.
And in a chamber close beside
Two hundred maidens did abide. . . .
These pretty maids did never lin¹
But in that place all day did spin. . . .*

¹ Stop or desist.

The Wool Trade

*Then to another room came they
Where children were in poore arraye:
And everyone sate picking wool
The finest from the coarse to cull:
The number was seven score and ten,
The children of poore silly men:
And these their labours to requite
Had every one a penny a night
Beside their meat and drink all day,
Which was to them a wondrous stay.*

Here there is probably the earliest mention of factory feeding as we know it.

After describing various other employees including shear-men, rowers, dyers, and fullers to work his once illegal 'fulling mill', the poem goes on to describe the methods employed for catering for the rest of John Winchcombe's staff:

*Each week ten good fat oxen he
Spent in his house for certaintie;
Beside good butter cheese and fish
And many another wholesome dish.
He kept a Butcher all the yeere,
A Brewer, eke, for Ale and Beere:
A Baker for to bake his Bread,
Which stood his hushold in good stead.
Five Cookes within his kitchen great,
Were all the yeare to dress his meat.
Sixe scullion boyes unto their hands
To make clean dishes, pots and pans,
Beside poore children that did stay
To turn the broaches every day.*

This was industrial catering with a vengeance, but unfortunately we cannot tell how accurate the description of Jack of Newbury's activities are, since the only evidence we have appeared about a century after his death. That he actually existed there is no doubt, and his epitaph may be read in Newbury church which he left money to rebuild. There is also a record

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extant showing that Thomas Cromwell once ordered 1,000 'Kersies' from Winchcombe's factories. Other large scale clothiers whose names have come down to us are Cuthbert of Kendal, Hodgkins of Halifax, Brian of Manchester, all of whom kept large numbers of employees. William Stump tried to turn Malmesbury and Oseney abbeys into factories in Henry VIII's reign, but was frustrated. He hoped to employ 2,000 operatives at Oseney near Oxford.¹ But factories were still unpopular and the weavers as a whole resented the large scale manufacturer, and by an Act of 1555 managed to get Parliament to restrict ownership of looms to two, though it is doubtful if this Act was ever fully enforced.

TOWN LIFE IN THE SIXTEENTH AND SEVENTEENTH CENTURIES

Meanwhile important changes were taking place in town life. England was settling down under the Tudors to a new type of social organization. The barons' wars of the fifteenth century had exhausted the resources of the great medieval landed families. The old manorial organization had broken up and given place to a society which centred on the power of the wealthy 'bourgeoisie'.

Under Henry VII England became stabilized politically and prosperous economically. Many medieval restrictions, which had tended to keep economic life static and conservative, were swept away. Such a restriction resulted from the medieval antipathy to lending money at interest which was stigmatized as 'usury' and forbidden by the Church: and had thus been largely confined to the Jews whose religion put them outside the ecclesiastical veto. Other restrictions, as we have seen, which were swept away by the Tudors were those limiting the number of apprentices and journeymen which could be employed by a single master, and forbidding the use of machinery or the multiplication of looms.

One of the greatest agents for the release of sixteenth century society from the hide-bound restrictions was the decline of the power of the Roman Church.

The dissolution of the monasteries caused widespread eco-

¹ Lipson, *op. cit.*, Vol. II.

Town Industry

conomic distress. It marked the final collapse in England of medieval society. The monasteries were the last of the great medieval manorial landlords. It is reckoned that the monasteries held at least one-fifth of the land of England. They were also the greatest dispensers of charity, as we have seen, in the kingdom. 'The contribution of the tithe was enforced, in order that a third part at least of the proceeds should go to the relief of the deserving poor.' It was the break up of the monasteries which accentuated the problem of the sturdy beggar, the vagabond and the homeless poor, which eventually forced Parliament to take action by bringing in the notorious Elizabethan Poor Law.

For a long time, however, even before the break-up of the monasteries, there had been a steady stream of dispossessed manorial servants to the towns. At the same time new towns had arisen outside the confines of the old ones, where craftsmen could set up in business unhampered by the restrictions of the guilds. Such a town was Manchester, which until 1836, still possessed no mayor or corporation, but was ruled by a borough reeve and two constables, and a host of picturesque medieval officials such as ale tasters and mastiff muzzlers, and thus remained immune from guild domination.

The discovery of the New World and the opening up of trade routes in the fifteenth century had increased the importance of ports such as Bristol and Plymouth. The 'Merchant Adventurers', joint stock organizations which pooled their risks and promised hopes of great reward to the comparatively small investor, made such ports their headquarters and contributed to their wealth and importance.

TOWN INDUSTRY

Meanwhile, in sixteenth century industry, the 'household' system continued while in the country the 'domestic' system was developing side by side with an elementary factory system. Dekker's plays give us a spirited picture of the everyday life of the Elizabethan craftsman and his workmen. 'We see the master rousing his household betimes to their work, and observe the blunt but hearty relations that subsist between the journeymen

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and the shrewish mistress of the household, their jealousy for the honour of St. Hugh (the patron saint of shoemakers) and their readiness to strike work at a moment's notice,' as Professor Unwin puts it.¹ When the young nobleman arrives disguised as a Dutch journeyman we see the apprentice sent out for pots of ale all round. Finally, we see the eccentric master, Simon Eyre, make a fortune in a lucky stroke of mercantile enterprise and ascend to the rank of Lord Mayor—not a piece of fiction but of fact, for though the picture has essentially a sixteenth century background the subject, Simon Eyre, was an historical character of the later Middle Ages who, like so many others, made a fortune in trade.

In point of fact, the Elizabethan Simon Eyre and his journeyman really only pictured the survival of a system which was dying. It is true, however, that the system survived many more years. What happened, however, was that the workshop gradually degenerated from a place where goods were made and sold, to one where they were merely passed on from the manufacturer to the customer. In other words, the 'work' dropped out of 'workshop' and the shop survived. The work was done elsewhere. But the manners and customs survived and the general medieval organization. Thus even up to the age when H. G. Wells wrote *Kipps* the shop assistants still lived under the proprietor's roof—though the proprietor had probably set up another more exclusive roof for himself elsewhere in the meantime. And even to-day there are still commercial establishments where the employees sleep on the premises. In a later age the notorious 'parish apprentice' system which became, as we shall see, a mere means of getting cheap white slave labour and exploiting it unmercifully, involved a 'prentice house' where the miserable inmates were too often housed in insanitary barracks and fed on nauseating refuse.

THE WORKMEN'S FOOD

The Elizabethan chronicler Harrison describes the workmen of the Tudor period as living on a great variety of meats including mutton, veal, lamb, port, souse (pickled pork), brawn,

¹ Unwin, *Studies in Economic History*. (1927).

The Workman's Food

bacon and 'foules of sundrie sorte', in addition to cheese, butter, eggs and fruit.

'The Tudor townsmen ate three meals a day', write Drummond and Wilbraham.¹ 'When times were bad he fell back on salt fish, cheese and soups. Breakfast, taken rather early at 6 or 7 o'clock, usually consisted of bread, salted or pickled herrings, cold meat, pottage, cheese and ale. The midday meal, which was often eaten at a tavern or bought at the cookshop and taken home, was roast meats, pies, stews, or soups, bread, cheese, ale or beer. Early in the evening at 5 or 6 p.m. came a supper of cold meats and cheese with bread and ale or perhaps a little wine.

'The only vegetable used in quantity was the onion, but cabbages were occasionally boiled with meat and soup. Fresh fruit, shellfish and sweet pastries were occasional treats.'

Municipalities still struggled to fix the price of food at such rates that the consumer did not suffer nor the producer get too small return for his labours. In 1618 we are told the Lord Mayor and Aldermen of London altered the weight of the penny loaf four times in an attempt to keep pace with the rapid fall in the price of wheat, until finally it reached seventeen ounces. The bakers protested and drew up a list of their expenses, which has particular bearing on our subject as it shows what a normal tradesman of this period had to pay for the maintenance of his journeymen and apprentices. The budget was as follows and is on a weekly basis:

	£	s.	d.
House rent at £30 per annum		11	6
Diet of man and wife		10	0
Diet of 3 children		7	0
Diet of 4 journeymen, 2 apprentices and 2 maids at 4s. per head	1	12	0
Clothing of man, wife and apprentices at £20 per annum		7	8
Clothing and schooling of three children		3	0
Wages of 4 journeymen at 2s. 6d. each		10	0
Wages of 2 maids at 10d. each		1	8
Yeast 10s. Wood 12s. Coal 1s. 4d. Sacks 1s. Salt 1s. Boulters 1s. Garner rent 2s. Baskets 3d. Water 8d.	1	9	3

¹ *The Englishman's Food.*

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Miller's toll 15s. Porter's fees 2s.

Parson, poor rate, scavenger, watch

Total expense of baking 6 quarters

17	0
1	0
<hr/>	
6	10 1 ¹
<hr/>	

The journeyman, though paid three times as much as the maid, is given the same amount of food, namely 4s. worth a week. Presuming he lived in with his master this would work out at just under 7d. per day. Now we know that the Lord Mayor was trying to increase the size of the 1d. loaf to 17 oz. A pound of meat cost about 2½d. Lacy gives the boy 2s. for six 'cans' of beer—presumably pints—in Dekker's *Shoemaker's Holiday*, written about this period. So presumably a journeyman, a maid and an apprentice might consume the equivalent of 17 oz. of bread (1d.), a pound of meat (2½d.), and a pint of beer (2d.), and still have 1½d. to spare for fish, fruit or vegetables during one day. It will also be noticed from this that the journeymen received food of value about midway between that of the master and his wife and the master's children, in addition to a wage of 5d. a day.

'Disputes of this fundamental character between municipal authorities and the bakers, butchers, brewers, fishmongers, poulterers, fruiterers and other victuallers were universal and incessant in Shakespeare's lifetime,' says Professor Unwin.

In 1533 the prices of beef and mutton were fixed by Acts of Parliament at ½d. and ¾d. a pound respectively. But the Act had to be repealed in 1542, and the price of meat rose to 2d. and 2¼d. towards the end of the century. In 1522 the Lord Mayor fixed the price of the best fat swan at 6s. 8d., storks were 4s., herons 2s. 6d., a large fat goose was 1s. 2d., chickens sold from 2½d. to 4d. each and eggs were 5 for a penny.

Thorold Rogers gives an interesting sketch of the changes in the amounts thought necessary for a labourer's maintenance in the fifteenth and sixteenth centuries. 'In the early part of the fifteenth century,' he writes, 'the average cost of a labourer's board is 9d. a week.' In famine years, he says, it rose to as high as 1s. 6d. 'In 1542, board and lodging are put at 1s. a week; but in ten years from this time it rises to an average of 3s. a week.'

¹ Unwin, op. cit., p. 308.

Wages and Food Prices

In 1562, 1563 and 1570, Queen Elizabeth made quarterly contracts for victualling the workmen in her dockyards at Deptford and Portsmouth. In the first year the contract was for an average of 4s. 0½d.; in the second 4s. 6d.; in the third at 3s. 11d. Similar contracts were made at 4s. in 1573; 4s. 8½d. in 1577; and 4s. 3d. in 1578.¹

WAGES AND FOOD PRICES

It is interesting to note the wages of the period from 1495 to 1725 as computed by Thorold Rogers² in relation to their purchasing power. Prices were rising during the whole of this period, largely owing to the successive debasement of the currency. In the year 1495 the average weekly wage of a day labourer in husbandry is 2s. a week: the country artisan could earn 3s. a week. At this time the price of wheat was 4s. 0¾d. a quarter; malt was 2s. 4½d. and oatmeal was 5s. 4d. a quarter. Rogers states that a peasant could provision his family for a year with three quarters of wheat, three of malt, and two of oatmeal, by fifteen weeks of ordinary work in such a year, while an artisan could do the same in ten weeks.

In 1533 the higher price of foodstuffs meant the labourer had to work about double the time of his forebear in 1495 for the same amount of provisions, although his wages had risen to 3s.

In 1564 the labourer's wage had risen to 3s. 6d. a week, but higher prices made it necessary for him to work forty weeks in order to provision his family. The artisan at this time would have to work 32 weeks for the same amount of provender. During the previous year there had been passed an Act whereby magistrates were empowered to fix wages in accordance with the price of food in their localities.

In 1593 wheat had risen to 18s. 4½d. the quarter, oatmeal to 29s. 4d. and malt to 12s. 3½d. A year's work would not supply the labourer with the quantity of foodstuffs which, in 1495, he could have gained with fifteen weeks' labour. The artisan would have to work forty weeks to obtain it.

1597 was a year of appalling famine in which wheat rose to

¹ *Six Centuries of Work and Wages in England.*

² *Ibid.*

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56s. 10½d. a quarter, oatmeal to 64s. and malt to 28s. 9d. The enforcement of the new Act did not, however, make sufficient allowances for these prices and artisans and labourers suffered accordingly.

In 1610 prices were more normal, but an artisan needed to work 43 weeks to attain the standard he could attain in 10 week's labour in 1495.

The peasant labourer could not attain the 1495 standard with his year's work and his standard of living was, therefore, considerably reduced.

In 1651 the artisan still needs 43 weeks' work to attain the standard of 1495, but the wages of the labourer have risen and his yearly earnings amount to about £18, which puts him in a far better position than in 1610.

The Statute of 1563 had far-reaching effects on rates of labour which lasted right into the nineteenth century. The following comments on it by an eminent economic historian are worth recording:

'This Statute', writes Dr. Tickner, 'differed from all the many Statutes of Labourers which had preceded it, for instead of fixing a maximum rate as other Acts had done, this Statute left the assessment of wages in the hands of the local justices of the Peace, who were free to vary the rate according to local conditions or the needs of the time, though all their assessments were subject to alteration by the Government. This Act remained in force for two centuries and a half, but it is by no means certain that it was observed during the time of the Restoration. Nor were the wages fixed by it sufficient as a sole source of livelihood, for though wages had doubled since the fifteenth century, the cost of food had trebled. Hence wage-paid labourers found it necessary to help out their earnings by engaging in by-industries such as spinning and weaving, and by farming a few acres of cultivable land which were generally attached to each cottage. During the reign of Elizabeth a labourer could earn 7d. a day in summer and 6d. in winter, with extras during the time of harvest, but the rates varied very much in different parts of the country.'¹

¹ F. W. Tickner, *Social and Industrial History of England*.

Cookshops and Taverns

COOKSHOPS AND TAVERNS

In the sixteenth century it became a regular habit to dine at taverns or 'ordinaries' as they were called. Here, we are told, 'for a shilling or eighteenpence a good dinner was available at certain hours of the day; roast beef and vegetables, roast capons and ducks, and cakes and fruit. Beer or wine was an extra. The taverns were very popular resorts, and some of them were famous meeting-places whose names have come down to us; the "Mermaid" in Cornhill, frequented by Ben Jonson and his followers; the "Mitre" in Chepe; "The Boar's Head" in East-cheap, the haunt of Falstaff; and the "Falcon" on Bankside, the resort of actors and playwrights. Drinking was a common vice of the time; in 1574 there were over 1,300 taverns in Middlesex and Surrey, and most of these would be in London itself. No fewer than eighty-six varieties of wine were imported, and the common people drank ale, beer, and cider. The best hostleries were places where good lodging and refreshment could be obtained; the worst were the haunts of card-sharpers and dicers, and worse. Tobacco was obtainable at most of the taverns. It had been first introduced by Hawkins in 1565, but its popularity was probably due to Raleigh. It sold at about three shillings and sixpence an ounce, and several smokers shared in one pipeful. At certain ale-houses it was possible to get the loan of a pipe and pipeful of tobacco for threepence.'¹

Among the best pictures of Tudor taverns are those given in Shakespeare's plays, particularly *Henry IV*, parts I, II and III. It will be remembered how the young Prince tempts Francis the 'drawer' to 'play the coward with his indenture and show it a fair pair of heels and run from it', and how Falstaff is robbed of his tavern reckoning showing 'but one halfpenny worth of bread to this intolerable deal of sack', but giving as a shrewd idea of the cost of a meal in the time of Elizabeth with its:

<i>Item</i>	<i>s.</i>	<i>d.</i>
A capon	2	2
Sauce		4
Sack, two gallons	5	8

¹ Tickner, *op. cit.*

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Anchovies and sack after supper	2 6
Bread	ob. ¹

DIET AND PRICES

Meanwhile, royal catering continued on as large a scale as ever. At a feast given at Ely House in the reign of Henry VIII (November 1531), Stow particularizes the following articles and their prices then prevailing:

	s.	d.	
Great beeves from the shambles	26	8	each
One carcase of an ox	24	0	„
Fat mutton	2	10	„
Great veals	4	8	„
Porks	3	8	
Pigs		6	„
Capons of Greece	1	8	„
Capons of Kent	1	0	„
Capons, coarse	1	0	„
Cocks, of grouse		8	„
Pullets, the best		2½	„
Other pullets		2	„
Pigeons		10	per dozen
Swans			no price
Larks		10	per dozen

The menu for the Election Dinner in 1546 for the Butchers Company was:

Brede	18d.
Alle	12d.
'Lownys of welle' (loins of veal)	2/10d.
'A breste of welle'	10d.
4 qurs of 'coollys'	20d.
3 'rompys of beff'	12d.
2 'rybbes of brawne'	4/4d.
'Wynne'	3/4d.
1 lb. of sugar	12d.
'Spyeses'	2/-
Rootes	1d.
A 'pottell of wynnegar'	8d.
Sawltte	1d.
6 lbs. of butter	12d.
6 'knockettes of welles'	2/4d.

¹ Ob.—'obolum', former sign for ½d. (*Henry IV*, Part I, Act II, Scene IV.)

Diet and Prices

In 1616 the menu was:

	£	s.	d.
Beef 6 surloynes, 3 ribbs and 9 stone for the poore	3	19	8
One kilderkine of ale and one kilder- kine of bere		12	0
Strewings oatmeall and opions		2	9
Oringado paste and arman paste		2	6
12 marybones oranges and lemons		5	0
Pipkins, rosemary and varies			8
A hundred egges		4	0
Barberyes ¹		1	0

But in the sixteenth century new foods began to appear and changes began in methods of eating and drinking. The potato was introduced in the sixteenth century, according to general belief, by Sir Walter Raleigh, who brought it back with him from America: Sir John Hawkins, it appears, introduced the sweet potato in 1564. Hakluyt wrote, 'these Potatoes be the most delicate rootes that may be eaten, and do farre exceed our passenepps or carets. Their pines be of the bigness of two fists . . . and the inside eateth like an apple, but it is more delicious than any sweet apple sugred'.

England had apparently lagged far behind the Continent with regard to vegetables, and it was not until this century that English gardens began to be used to grow vegetables which had been known and used for several centuries across the channel. These vegetables, according to Harrison, included 'melons, pompions, gourds, cucumber, radishes, skirets, parsneps, carrets, cabbages, naeuwes (rape), turneps, and all kind of salad herbs'. According to Benjamin Disraeli's father, Isaac, who wrote the *Curiosities of Literature*, it was Sir Anthony Ashley of Wimbourne St. Giles, Dorset, who died in 1627, who first planted cabbages in this country: and is commemorated by the fact that a cabbage appears at his feet on his monument. It is probable, however, that the cabbage was used in England before Sir Anthony, who merely improved the stock.

Gilbert Kymer, a fifteenth-century writer, can enumerate besides a few wild plants, only the following products of an Eng-

¹ Hackwood, *op. cit.*

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lish kitchen garden of that period: cabbage, lettuce, spinack, beetroot, trefoil, bugloss, borage, celery, smallage (wild celery), purslaine, fennel, thyme, hyssop, parsley, mint, a species of turnip, and a small white onion. According to him, all these vegetables were boiled with meat. He observes that some were eaten raw, in spring and summer, with olive oil and spices, but questions the propriety of the custom. This is the earliest notice extant of the use of salad in England.¹

Hackwood states the cauliflower was first brought into England from Cyprus about 1603, and broccoli came into this country from Italy in the sixteenth century. 'According to Verstegan', says Hackwood, 'that which we call colewort was the "greatest potwurt in time long past that our ancestors used, and the broth made therewith was thereof called kele; for before we borrowed from the French the name of pottage, and the name of herbe, the one in our owne language was called kele, and the other wurt; and as this kelewurt of potage-herbs was the chief winter-wurt for the sustenance of the husbandman, so was it the first hearbe that in this moneth began to yield out wholesome young sprouts, and consequently gave thereunto the name of sprout-kele". The "kele" here mentioned is the well-known kale of the cabbage-tribe.

'The finer kinds of bean were introduced into this country in the reign of Henry VIII. French beans originally came from India. The Jerusalem artichoke is a native of Peru, and was called "girasole" by the Italians who introduced it.'

Hackwood tells us that many of the fruits now in use were introduced into this country between 1500 and 1600, the plum about 1520, the apricot 1540, and the peach about 1560. The apricot when first drawn from America was not larger than a damson. Better varieties of the strawberry came at different periods, one from Flanders in 1530 and another from the Levant in 1724.

Although strawberries have been grown in England from early times it was Wolsey, according to Hackwood, who taught us how to eat strawberries and cream. Shakespeare tells us that the Bishop of Ely grew fine strawberries in his palace gardens

¹ Hackwood, *op. cit.*

Diet and Prices

near Holborn, later taken over by Sir Christopher Hatton by peremptory command of Queen Elizabeth and now known as 'Hatton Gardens'. The strawberry has been vastly improved since his time, and of this luscious fruit a connoisseur—Dr. Butler in the seventeenth century (not Dr. Johnson in the eighteenth as Barrie once wrongly quoted)—has observed, 'Doubtless the Almighty could make a finer berry—but doubtless he never did'.

Flanders, in 1540, also sent us finer cherries and better gooseberries. Later, America returned to us improved varieties or stronger stock of English fruits—the black walnut 1620, the Virginian raspberry about 1660, the Canadian currant in 1705, and the American costard apple in 1736.

English varieties of apples, pears, and gooseberries had long been cultivated, while the strawberry and the raspberry had only grown wild. The whole race of cherry trees introduced into Britain by the Romans was lost in the Saxon period; it was the gardener of Henry VIII who reintroduced the cherry and encouraged its cultivation. The grape had been cultivated for wine-making by the Saxons, but the industry became extinct centuries ago, declining as the importation of French and Spanish wines advanced.

'The quince had been brought into England from Austria prior to 1573. Real marmalade, it should be remembered, is made from the quince, called by the Portuguese marmelo, and when made into jam, marmelado. Quinces and oranges were often cooked together, and there was such a preserve as "orang-dow".'

'Rhubarb was brought into this country also in 1573, from the Volga, but for two centuries it remained a gardener's curiosity, so that its use here as an article of food is of comparatively recent origin. In 1810, when a Deptford market gardener sent a few sticks into London he was unable to find customers for it. However, the use and cultivation of the plant made rapid progress from that time forward.'¹

¹ Hackwood, *op. cit.*, p. 142-4.

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FISH

Fish had always been an important article of diet in medieval England, largely owing to the Church ordinances forbidding the eating of meat on Fridays or in Lent. In the reign of Edward VI, however, a new ordinance came out forbidding the eating of meat on Wednesdays, Fridays, and Saturdays—not for any religious reasons, but in order to encourage the fishing industry and increase skill in seamanship necessary to ensure a good supply of men for England's developing navy: also to preserve cattle and sheep for breeding purposes.

Unpleasant penalties were inflicted for eating flesh on fish-day, as when, in 1552, 'a wyfe of Hammersmith brought two pigges to London to a carpenter dwelling in Smythfeild . . . contrary to a proclamation for eating of flesh in Lent, and by judgment of My Lord Mayor and the Aldermen they did ryde on 2 horses with panelles of strawe about the markettes of the citie, having eche of them a garland on theyr heades of the pyges pettie toes and a pygge hanginge on eche of theyre brestes afore them'.¹

Falstaff, it will be remembered, tells Mistress Quickly, 'There is another indictment upon thee, for suffering flesh to be eaten in thy house, contrary to the law'. To which she replies, 'All victuallers do so: what's a joint of mutton or two in a whole Lent?'²

Andrew Boorde, in 1542, wrote, 'Of all nacyons and countres, England is best serued of Fysshe, not only of al manner of see-fysshe, but also of fresshe-water fysshe, and of all maner of sortes of salte-fysshe.' Queenhythe, the chief water gate of London, where the fish was brought in, was also the main fish market where the fish was salted and pickled. Only fish from the nearby Essex or Kent coasts was sold fresh. London's main supply of fresh fish came from the rivers, brooks and ponds of the surrounding country. Stow, writing in 1598, describes the 'towne ditch' outside the walls of London as being 'a great store of

¹ Wriothesley, *A Chronicle of England, 1485-1559*, quoted Drummond and Wilbraham, *The Englishman's Food*.

² *Henry IV*, Part II, Act II, Scene IV.

Preservation and Seasoning of Food

very good fish of divers sorts'. The Thames, as we have seen, yielded salmon in the Middle Ages and was full of nets whose size was regulated to let the small fish through in order to keep up the stock.

Those who caught or sold fish below a certain size were liable to share the fate of an unfortunate woman in March 1561 who 'dyd . . . ryde a-bowt Chepesyd and London for bryngyng yonge frye of dyvers kynd unlafull, with a garland a-pone her hed with strynges of the small fyse.'¹

Oysters, in 1491, were sold at 4d. a bushel and, with mussels, were popular and plentiful. Oysters were kept fresh by immersion in brackish water for as long as twelve days according to Sir Hugh Platt.

Fishmongers were divided into two categories, the stock fishmongers who dealt in dried fish, mainly cod, haddock, pollack and ling from Iceland and Norway, and the salt fishmongers who sold large quantities of salted and pickled herrings, cod, eels, whiting and mackerel from Holland, the Baltic and the east coast of England. These two companies united in 1536 to form the great City Fishmongers Company. The Salters Company, incorporated in 1394, did a large trade in the salt required for the preservation of fish and meat. Fresh fish, it appears, formed a very small part of the stock in trade of the fishmongers until comparatively recent times.

Herrings, which came chiefly from Yarmouth, were popular and generally cheap, though their price varied from as little as forty to the 1d. to $\frac{1}{2}$ d. each. Salmon sometimes cost as much as 3s. to 5s. each about this time and were occasionally powdered and served with salt.

PRESERVATION AND SEASONING OF FOOD

Winter feeding of livestock was still a problem in the sixteenth century, and even in the seventeenth century it was a regular part of the household routine of the Verney family of Claydon, in Buckinghamshire, to salt down meat for the winter, owing to the necessity of killing off the weaker cattle before Christmas.

¹ *The Diary of Henry Machin, 1550-63*, quoted by Drummond and Wilbraham.

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Spices were still in demand to make tainted meat edible. In addition to washing with vinegar such methods were used as that advocated by Hugh Platt, a gentleman of Lincolnes Inne, in 1594 to sweeten venison that was 'greene'. Platt's advice was to 'cut out all the bones and bury in an old coarse cloth a yard deepe in the ground for 12 or 20 houres' until it would 'be sweete enough to be eaten'.

The demand for onions, which had been in use for a long time in England, became so great in London in the sixteenth century that large quantities were imported from Flanders.¹

Saffron, which was grown in quantity in the eastern counties, was also very popular in the sixteenth century for flavouring and colouring dishes. Its price was at times as high as 20s. a pound. Sugar, which had cost 1s. to 2s. a pound in the thirteenth and fourteenth centuries fell to anything between 4d. and 10d. in the early Tudor period as the result of Portuguese trade with the Canaries and Madeira, but in 1553 William Cholmeley, in *The Request and Suite of a True-Hearted Englishman*, complains that 'the sugar that I have knowne at iijd. the li is now at xiiijd.'

Milk, according to Stow, was $\frac{1}{2}$ d. for three pints in summer and $\frac{1}{2}$ d. a quart in winter. It came from farms just outside the towns and could be kept. Butter was extensively salted for winter use and was used a great deal in cooking. As the result of the 'pestiferous purueiours' and 'buttermen', as Stow calls the middle men who abounded at this time, he complains that 'our butter was scarcelie woorth eighteene pence the gallon . . . is now three shillings and four pence, and perhaps five shillings'. So rancid was the salt butter sold in the towns that it was often sold in liquid form, Sir Jack Drummond tells us.

DRINKS

An interesting feature of this age on the negative side is that wine ceased to be made on any scale in England. This was due very largely to the dissolution of the monasteries which had owned extensive vineyards. John Parkinson, in 1629, wrote, 'Manie monasteries in the kingdome having Vineyards had as

¹ Drummond and Wilbraham, *The Englishman's Food*.

Drinks

much wine made therefrom as sufficed their Covents yeare by yeare; but long since they have been destroyed, and the knowledge how to order a Vineyard is utterly perished with them'. It might be an interesting experiment for promoters of rural industries such as the proprietors of Dartington Hall in Devon, to attempt to revive the wine-growing industry in England. Sir Jack Drummond mentions a treatise discovered in the library of Colchester Castle, written in the early fifteenth century and now published by the Early English Text Society, which might give them some interesting information on the subject.¹ Ale was always a staple drink in English households. It was in the Middle Ages a weak sort of barley water without much body or alcoholic content. The brewing of beer was an innovation from Flanders. In 1436 a Royal Writ describes it as 'notable, healthy and temperate'. Andrew Boorde contemptuously called it the 'naturall drynke for a Dutch man—now of late days it is moche used in England to the detryment of many Englysshe men'. A foreign visitor in 1598, however, says 'the common drink is beer, which is prepared from barley, and is excellently well tasted but strong and what soon fuddles'. An old rhyme says 'turkies, carps, hoppes, picarell and beere, came into England all in one yeere', but its accuracy is not vouched for. According to Hackwood the year was 1520, and he tells us that turkeys came from Mexico. Henry VIII tried to keep hops out of beer as well as brimstone. Another bitter substance introduced into it was extract of wormwood. Beer kept longer than ale owing to the preservative quality of the hops which, in spite of Royal Ordinances which lasted to the days of Charles I, generally seem to have found their way into it eventually, and to-day would be missed if omitted. Even to-day, however, Jacobite fanatics hold it as one of the crimes of the Roundheads that by executing King Charles they permitted adulteration of beer by hops which he had always opposed. Sir Jack Drummond relates that one reported test of good beer about this time was for the ale-conner, or taster, to pour some beer on a stool and then sit on it. If his leather breeches stuck to the stool he would know that the beer had been sugared.

¹ *Palladius on Husbandrie*, edited by Rev. Barton Lodge, 1873-9.

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Cider, perry, methaglin (which was a kind of mead) and wine were also drunk throughout the Middle Ages in Tudor times. Wine, though manufactured by the monasteries for their own use, was also imported in quantities from abroad. From as far away as Crete came the famous malmsey wine which is commonly rumoured to have caused the death of John of Gaunt's son Lionel, Duke of Clarence. In 1515 this wine cost about 1s. 4d. a gallon: claret and sack, so beloved of Falstaff, cost about 8d.

FOOD SUPPLY IN TUDOR ENGLAND

To turn to the basic food situation of this period we are told by Professor Unwin in his *Studies in Economic History*, that: 'Harvests fluctuated terribly in the Middle Ages . . . hence in all large cities public provisions in times of scarcity became an absolute necessity. Municipal granaries, mills and bakehouses were built, and the city companies were obliged to provide each their quota of corn.' The system survived throughout the sixteenth century but the restrictions, which had been strictly enforced in the Middle Ages, to prevent middlemen buying up available supplies to 'enhance' the price, were breaking down. Hence there arose a class of enterprising middleman or dealer which, in fact, did much to aid in the fair distribution of food-stuffs throughout the country, necessary as the result of the specialization of certain districts in certain staple food materials. Harrison, in his *Description of England*, published about the middle of the sixteenth century, writes, 'It is a world also to see how most places of the realm are pestered with purveyors¹ who take up eggs, butter, cheese, pigs, capons, hens, chickens, hogs, bacon, etc. in one market . . . to sell the same in another, or to poulterers in London.' In Elizabeth's reign numbers of licences were granted to London bakers to import corn from Kent, and to Suffolk cheese and butter factors to export supplies to London.²

Another light is thrown on these middlemen, however, in certain 'orders devised by special commandment of the Queen's Majesty for the relief and ease of the present dearth of grain

¹ See *supra*, p. 88.

² Unwin, *op. cit.*, p. 307.

Food Supply in Tudor England

within the realm', dated 1586. Sheriffs and J.P.'s were to set up juries in each district to enquire 'what number of badgers, kid-
ders, broggers and carriers of corn do inhabit within the said parish . . . also the number of maltmakers, bakers, common brewers or tipplers . . . within the said parish . . . (and) who within the same parish be the great buyers of corn'. It was enacted that 'engrossers of corn be carefully seen into and severely punished according to law'. The Sheriffs and J.P.'s were enjoined 'to take order with the common bakers for the baking of rye, barley, peas and beans for the use of the poor': which gives an interesting picture of Elizabethan method of meeting a famine.

Meanwhile, in the actual growing of food great changes had been taking place. The manorial open field system had gradually broken up and enclosures had taken its place. The chief cause for this had been the sheep.

Sir Thomas More, in his *Utopia*, had written in the days of Henry VIII, 'Your sheep that were wont to be so meek and so small eaters, now, as I heare say, be become so great devourers and so wild that they eat up and swallow down the very men themselves. They consume, destroy, and devour whole fields, houses and cities. . . .'

As we have seen the rise of the woollen trade had been fostered by ordinances of Henry III. But even before that, English wool had been in great demand all over Europe for its excellent quality. The embargo on its export did not decrease the demand for it, because it coincided with the greatly increased demands from English manufacturers. The cloth trade was, as everyone knows, the foundation of England's commercial greatness, and the importance of its raw material to the realm is still symbolized by the fact that the Lord Chancellor sits on the 'Wool-sack' in the House of Lords. Before the prohibition of its export and as the result of the establishment of the great 'Wool Staple' at Calais, then an English town, the wealth of the King's exchequer had been enormously enriched by the dues paid on the many thousands of bales of wool which passed through it on the way to the countries of Europe. With the increase of the cloth trade in England, however, wool became a great source of

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revenue to the landowner. The impoverished manorial lord, his aspiring bailiff and the liberated manorial tenant all saw in wool a means of gaining greater profit from their land than husbandry. So more and more land came to be laid down to pasture, to the detriment of the peasant and the destruction of the open field system of agriculture. In the fourteenth century the great plague known as the 'Black Death' is supposed to have halved the population of England with the result that labour became scarce and land was left untilled and tenantless. Here was the chance to increase pasturage. In the fifteenth century the barons were fighting among themselves. Enterprising stewards of the type exemplified by the Howards and Pastons were given a free hand to run their lord's manors rather as profit-making concerns than social communities and by the sixteenth century, in spite of revolts and protests from the peasants and half-hearted efforts by Parliament, the old open field system of semi-communal ownership of agricultural land had given place to a new type of enclosed farming in which the land was broken up into hedged units, some given over to pasture and some to the new type of husbandry, which had come about through the purchase of their freedom by the serfs and villeins. But even while Sir Thomas More was indicting the sheep for having become 'masters of men', the sheep rearing industry was diminishing and towards the end of the sixteenth century these enclosures ceased to be used for sheep pasture and helped on a new system of mixed farming which it is computed increased the yield of the land two and a half times. 'Once the farmer had thus obtained the sole control of his own portion of land', writes Dr. Tickner, 'he began to give greater care and attention to farming methods, and now that the craze for sheep-farming had abated, there was a return to that system of mixed farming, partly tillage and partly stock-raising, which is so characteristic an English method. Many causes contributed to this result. Careless breeding and the use of unsuitable pastures had led to a deterioration in the quality of the wool produced. The increase in the population which followed the years of Tudor peace and prosperity gave rise to an increasing demand for food, and made corn-growing and the rearing of stock for

Food Supply in Tudor England

food very profitable. Tillage was now no longer a mere farming for subsistence, but began to be a deliberate attempt to supply town markets with produce. The land was an attractive investment in many ways and good profits were expected from the money invested in it. It was no longer necessary to enforce the statutes against enclosures. Some progress was made in methods of tillage and the planting of new types of crops, and the yield from the land was raised to something like two and a half times what it had formerly been. The association with Holland was a valuable one in this respect. The Dutch were noted dairy farmers, with methods well worth copying; the increased interest in stock-rearing made attention to winter foods absolutely necessary, and this was a matter in which the Dutch could give valuable advice. More attention too was paid to the garden, again under Dutch influence; the use of the spade became more common; radishes, turnips, parsnips, carrots, cabbages, cucumbers, and other salads were grown more freely, and onions were brought from Flanders. Hops were also grown again in considerable quantities, and there were plenty of well-stocked orchards. The progress continued throughout the seventeenth century in spite of the troubles of the Civil War.

‘The Government interfered in many ways in matters agricultural. The Mercantile system, or policy of power, in terms of which the country was governed, demanded among other things a sturdy population, and this could best be obtained by fostering tillage, both as a means of employment for many persons and as a source of food for all.’ At this time agriculture was the main occupation of the English people. Nearly five sixths of the population were directly or indirectly associated with it, and it was the policy of the Government to encourage it as much as possible. The Statute of Artificers of 1563 tried to check the growing shortage of labourers by forcing all able-bodied men to serve as agricultural labourers, unless they had a valid claim to exemption. All artisans had to help in the fields at harvest-time if necessary.

The Rise of Capitalistic Organizations

ELIZABETHAN POOR LAWS

'Unemployment' is only a new word for a very old evil in this country and the more we read of Social history the more deeply rooted we realize this evil to be. It was increasing all through the Middle Ages. The break up of the manorial system and the enclosures of the common fields sent many small tenants and villeins off to seek work elsewhere. Some found it, some became vagrants and sturdy beggars. The Black Death in 1349, by disrupting economic life, did not help the situation. True, it killed off a large number of labourers, but it also killed off large numbers of potential employers and hastened enclosure and sheep farming. The Peasant Revolt of 1381 and Jack Cade's Rebellion, nearly seventy years later, bore witness to industrial unrest and lack of proper employment. The trade restrictions of the guilds were partly a cause of unemployment by closing the door to the expansion of industry in the towns. By the age of Elizabeth the evil had become acute. There was a large floating population of vagrants, formerly supported by the monasteries and by such charitable individuals as the Earl of Derby who fed over sixty people twice a day, and all comers thrice a week. Even the ruthless Thomas Cromwell served at his gate more than two hundred people twice every day with bread and meat and drink: which must have taxed the catering resources of his household to no small extent. In the Middle Ages almsgiving was looked upon as a religious duty, and thus a race of professional beggars had evolved who looked upon it as their right to be supported by charity. It is computed that out of the Elizabethan population of round about five million people, ten thousand were unemployed or unemployable. The Tudors were more ruthless than their predecessors, and decided that something must be done to curb this scandal. They decided to punish beggars in the stocks (1495), to whip them at the cart-tail (1531) and generally to make life so unpleasant for them that they would rather work. But until the Act of 1536 they made no provision to see that work was provided. This Act provided relief for those obviously unable to work for physical reasons, and empowered the churchwardens of each parish to raise funds

Elizabethan Poor Laws

to provide work for the parish unemployed. Children found begging were to be taken from their parents and set to work. An important principle was established which lasted for nearly three hundred years, namely that each parish was responsible for its own poor and unemployed.

In 1547 a further development was introduced into the Tudor Poor Law which was to have the most devastating consequences for the future probably of any Act which has ever found its way on to the Statute Book. This Act empowered local poor law authorities to take their children away from local beggars and to apprentice them until they were twenty-four. Able-bodied vagrants could be condemned to bondage either temporary or permanent and could be branded if they left the work they were condemned to do. Its severity was mitigated in the reign of Elizabeth, but certain of its principles survived to be embodied finally in the famous Elizabethan Poor Law of 1601. This Act appointed that 'the churchwardens of every parish, and four, three, or two substantial householders there as shall be thought meet . . . to be nominated yearly shall be called overseers of the poor of the parish . . . with the consent of two or more justices of the peace . . . shall take order from time to time for setting to work of the children of all such whose parents shall not by the said churchwardens and overseers . . . be thought able to keep and maintain their children; and also for setting to work all such persons married or unmarried having no means to maintain them or use no ordinary and daily trade of life to get their living by . . . and also to raise weekly or otherwise by taxation of every inhabitant, etc. . . . in such competent sum or sums as they shall think fit, a convenient stock of flax, hemp, wool, thread, iron and other necessary ware and stuff to set the poor on work . . . and also competent sums of money for and towards the necessary relief of the lame, impotent, old, blind and such among them being poor and not able to work, and also for putting out of such children to be apprentices, to be gathered out of the same parish according to the ability of the said parish: and to do and execute all other things as well as for the disposing of the said stock as otherwise concerning the premises as to them shall seem convenient.' The Act directed the churchwardens

The Rise of Capitalistic Organizations

and overseers to meet once a month and to render yearly accounts of their funds and the uses to which they had been put. The Act ends with perhaps the most important and ominous of all its clauses, which enacted that 'it shall be lawful for the said churchwardens and overseers . . . by the assent of any two justices of the peace . . . to bind any such children as aforesaid to be apprentices, where they shall see convenient, till such man-child shall come to the age of four and twenty years, and such woman-child to the age of one and twenty years, or the time of her marriage'. Two important consequences arose out of this Act which have an important bearing on our subject, one was the system of parish apprenticeship as it expanded in the Industrial Revolution, the other was the development of the workhouse. Later Acts expanded and amplified this Act, and an Act in 1662 forbade the movement of the poor from one parish to another, which had hampering effects on the mobility of labour. It was, however, made legal in the seventeenth century to apprentice children wherever work could be found for them with results which will be described later.

Chapter IV

THE SEVENTEENTH AND EIGHTEENTH CENTURIES

POINTERS TO THE FUTURE

Though some historians seem to like us to believe that history is neatly divided up into periods labelled 'The Middle Ages', 'The Stuart Period' or 'The Industrial Revolution' all of which begin and end with definite dates, in fact, history is a continual stream of developments in which tendencies which bear fruit in one age are discernible as growing up in another and of surviving after their most fruitful period, in yet a third. Thus if, at times, the historian overlaps from one age to another, this is not due to inaccurate or untidy thinking, but is the result of the fact that movements and trends in history cannot be pinned down like captured butterflies and labelled and docketed, but must rather be traced through successive stages of growth, development and decline. Of nothing is this so true as of that collection of phenomena generally known as the 'Industrial Revolution'. In point of fact one might say that the industrial revolution started with the first application of coal to industrial purposes, or the first gathering of operatives into factories such as John Winchcombe's at Newbury. These phenomena developed and bore fruit in the latter half of the eighteenth and the beginning of the nineteenth centuries, where by a slow accumulation of circumstances and a general coming together of a number of different agencies, results were achieved of greater magnitude in the industrial world than had

The Seventeenth and Eighteenth Centuries

hitherto been achieved in this country. Perhaps the most important feature of the industrial revolution was the development of this country's foreign markets, since to produce without markets to absorb the produce is futile. The seeds of foreign trading were sown in the Middle Ages, they sprang up dramatically in the period of the Tudors, were nurtured by the Stuart Mercantile Policy and the development of great companies such as the East India Company, until finally, when we discovered the means of mass manufacture in factories we had the channels of distribution ready to hand to get rid of the produce. Economic historians generally label the seventeenth century the period of mercantilism, because it was during this century that England stimulated our mercantile trade by bringing in a number of Navigation Acts to restrict English trading to English ships, so increasing our merchant navy. A direct result of foreign trading was foreign colonization and settlement, and the roots of the British Empire were planted by the merchant adventurers and mercantile traders of the sixteenth and seventeenth centuries. It is not proposed to dwell on the history of British colonial expansion. It is only necessary to point out how it bears on the subject of this present inquiry, which it does in two main particulars: first, by its effect on the growth of industry at home, and second by the development of the supply of raw materials from abroad both as a further stimulus to industry and a means of enriching our national larder.

DEVELOPMENT OF THE COAL INDUSTRY

Important developments took place during the seventeenth century in the coal and metal industries. Coal had been mined in the Newcastle area during the Middle Ages and brought to London by sea: hence the 'sea-coal fire' of Shakespeare's day. The workings of coal in early days were mostly on the surface for what is known as 'outcrop' coal. In the sixteenth century deeper shafts were sunk and by the seventeenth some pits had reached appreciable depths. Writing at the beginning of the eighteenth century, Defoe states that coals are 'dug in the pit a vast depth in the ground sometimes fifty, sixty, to a hundred fathoms'. Employment in coal mines was mainly scattered over

Development of the Coal Industry

a wide area and mining units were small until towards the end of the seventeenth century, though there were exceptions such as that mentioned by Grey in his Survey of Newcastle in 1649, where he wrote 'one coale-merchant imployeth five hundred or a thousand in his works of coale'. The average size of pits, however, is shown by the fact that in 1675 a pit at Whitehaven had a crew of 19 underground workers. At Bo'ness in 1681 there were 37 bearers and 13 hewers. Defoe, however, wrote in 1727 that it was estimated that 30,000 people worked underground regularly digging coal in Newcastle-on-Tyne.

From earliest times miners appear to have been looked upon as uncouth and primitive people. Women worked regularly in the mines until the nineteenth century and children were employed in the lighter duties. One eighteenth-century observer describes women and girls being employed by their own husbands and fathers to drag the coal up to the pithead in baskets on their backs. An indication of the primitive conditions in the mines is shown by the widely used method of treating a man who had been rendered unconscious as the result of an explosion which was by digging a hole and burying his head in the ground. If that proved ineffective, we are told, it was the custom to 'tun them full of good ale, but if that fail they conclude them desperate'.¹

A bad habit in the coal industry which has some bearing on our subject was that of paying the men's wages in kind or 'truck'. Before 1662 many of the pit men of Newcastle had been forced to accept their wages in the form of corn. This need not necessarily have been a hardship. Sometimes, as we shall see, employers made special efforts to supply staple foodstuffs to their operatives as part of their wages in order to avoid the high costs of the middlemen. That the truck system however became a serious evil in the coal industry is shown by the fact that a pamphlet of 1793 denounces Scottish owners for making a direct profit by selling household commodities to miners at advanced prices and by taking a share of the gain on the beer and whisky sold by the overmen to the miners. In 1800 it was reported that the lessees of the mines were often brewers and

¹ Ashton and Sykes, *The Coal Industry of the Eighteenth Century*.

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owned public-houses attached to the mines where the men were paid, and that frequently 'inferior agents such as overmen, etc. keep ale houses and retail shops where the pitman is often obliged to purchase articles for himself and family at exorbitant prices, merely from having involved himself in a load of debt which the shopkeeper too frequently leads him into'. In 1765 coal-miners in Ireland had to be protected from being paid wages in coal. A certain Richard Atkinson, writing to the newspapers in 1765, said of the Tyne and Wear collieries, that the overseer appointed by the proprietor to pay them their wages 'constantly keeps a shop contiguous to the pit, where he lays in every necessity both for belly and for back and obliges the poor men to buy whatever they want from him, stopping it out of their wages and keeping them constantly in his debt'.¹

Lipson states that, 'In Scotland the miners remained in a condition of serfdom until the last quarter of the eighteenth century, when an Act of Parliament liberated them from bondage.'² That these words are no exaggeration of the condition is proved by the sober statement of the Act itself, which says in in the preamble, 'Whereas by the Statute Law of Scotland as explained by the judges of the Courts of law there, many colliers and coal-bearers and salters are in a state of slavery, or bondage, bound to the collieries and salt-works, where they work for life, transferable with the collieries and salt works when their original masters have no use for them. . . .'

By the second half of the eighteenth century the average number employed in each mine was increasing, though in the north, during the 1760's, the normal number of workers in a pit was forty, according to Ashton and Sykes.³

Further light on the payment of wages in the mining industry is shown by Ashton and Sykes, when writing of 'subsistence' allowance paid in addition to wages: 'A very common arrangement was that whereby the employer paid to the workers each week or fortnight a 'subsistence' which did not bear any necessary relation to the earnings of the period. . . . The system was in

¹ J. L. and B. Hammond, *The Skilled Labourer*.

² Lipson, *op. cit.*, Vol. II, p. 124.

³ Ashton and Sykes, *op. cit.*

Development of the Coal Industry

operation at Griff in Warwickshire, at the beginning of the eighteenth century. . . .’ It also appears to have existed in South Wales. At Culross a subsistence was paid each fortnight and is described as helping the men to ‘lay in a supply of beef for their families in November’, as well as to supply them with good clothes, household furniture, etc., with the balance of their wages, which were paid at intervals after various deductions for tools, candles, and other items. What it amounted to was that the miner was paid a fortnightly sum to keep him and his family alive, irrespective of and in addition to his wages so that it constituted an admission of responsibility on the part of the employer to feed, house and clothe his workmen as well as to pay them a wage.

A variation of wage payment, which though involving the ‘truck’ system appears to have been of benefit to the miners, is that in operation in some places. On the Tyne and Wear where rye was the staple diet of the colliery population we find that 8½d. is deducted from the cost of getting a chaldron of coal at Chapple Colliery in 1796 on account of rye for the workmen to whom it was given as part of their wages. In 1800, when the price of rye was 11s. a quarter, employers on the Tyne commonly supplied it to their colliers at 5s.

Sometimes the miners took matters into their own hands. In 1764 some Derbyshire colliers seized wheat which was being offered at 8s. 4d. per bushel and sold it at 5s.

That the picture was not one of unrelieved gloom for those employed in the coal industry, even in those days, is also shown by several instances of ‘welfare’ schemes undertaken by the more enlightened employers.

In the sixteenth and seventeenth centuries the coal trade of Newcastle was entirely in the hands of a powerful ‘cartel’ as we should call it to-day, which was known as the ‘Newcastle Hostmen’. This had started as a distributing organization with exclusive medieval rights of trading. Soon the ‘Hostmen’ began to buy up collieries and to exercise monopoly powers over prices. Objections were put up in London against the high price of sea-coal and the Newcastle monopoly stood firm. A deadlock ensued which meant a temporary stoppage of supply. In order to safe-

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guard the workmen in future against similar stoppage of work the Hostmen organized an unemployment fund, the first on record of its kind, of which details are given in the company records of 1666, which run as follows:

‘And for as much as this Company doth foresee that by reason of the laying in the works, as aforesaid, the poor workpeople are come to extreme want, they have likewise thought fit and it is hereby ordered that every brother and sister of this Company shall . . . weekly . . . pay one penny for each and every chaldron of coals . . . cleared at the custom-house . . . during the time aforesaid which sums so received the stewards are to pay unto the respective coal-owners to be by them distributed to the poor workpeople of each respective colliery from whence the coals so cleared shall come forward for the relief of their present necessities.’

At Shott’s (Lanarkshire), in 1773, a collier was allowed two pecks of meal a week when sick. We are also told that at some collieries ‘Almost any departure from routine operations was marked by the provision of ale and sometimes of food. In a heavy frost in the winter 1770–1, bread, cheese and ale were supplied to colliers who worked all night at the Bridgewater Pits. And at Barlowe ale was a common solatium for work in wet or inconvenient places’.¹ Also ‘It was the custom at many collieries to hold an annual feast, the cost of which was met by the proprietor. At Worsley the beef provided for the Christmas dinner of the labourers in 1767 cost the Duke of Bridgewater 3½d a pound and that provided for the colliers 4d.’²

When a new pit was opened or coal first reached, great celebrations took place. ‘When waggons began to load from the newly won colliery on Waldrudge Fell, near Chester-le-Street, on 20 September 1799—some thousands of people attended. . . . In the afternoon they returned to the house near the colliery where an excellent cold dinner was provided, consisting of a sheep roasted whole, six sheep in quarters, and half an ox which was washed down with eight barrels of good ale. . . .’¹

A famous blue-stocking and colliery owner, Mrs. Montagu,

¹ Ashton and Sykes, *op. cit.*

² *Ibid.*

Development of the Coal Industry

writing in 1775, gives a slightly condescending description of her maternal solicitude for her employees in the Tyne Vale. 'As to Denton', she writes, 'it has mightily the air of an ant-hill: a vast many black animals for ever busy. Near four score families are employed on my concerns here. Boys work in the colliery from seven years of age. I used to give my colliery people a feast when I come hither, but as the good souls (men and women) are very apt to get drunk, and when drunk very joyful, and sing and dance and holloo and whoop, I dare not on this occasion (her husband had recently died) trust their discretion to behave with proper gravity, so I content myself with killing a fat beast once a week, and sending to each family, once, a piece of meat. It will take some time to get round to all my black friends. I had fifty-nine boys and girls to sup in the courtyard last night on rice pudding and boiled beef; to-morrow night I shall have as many. It is very pleasant to see how the poor things cram themselves, and the expense is not great. We buy rice cheap, and skimmed milk and coarse beef serve the occasion.'¹

By 1798 miners' wages appear to have increased to 16s. a week as compared with 9s. paid to agricultural labourers. This year a parson, called Gisborne, publicly accused the miners of 'improvidence', saying they squandered their newly earned money by giving their families three meat meals a day. After the first week, however, they were reduced to a diet of rye-bread with oatmeal and water. Gisborne praised the 'truck' system as conducive to thrift and economy.

An interesting example of the provision of necessities by public-spirited employers, for their operatives, of which other instances will also be quoted later, is that demonstrated by the proprietor of Hasland Colliery in Derbyshire, John Broxupp, who also owned a farm of which some of the produce appears to have been paid in place of wages to the colliery employees. On 29 May 1798, a certain Richard Ashley received five quarters of wheat, valued at £5, as payment for the carriage of coke. Next year the manager, Richard Clay, was debited with several sums for 'beef to colliers' obviously supplied from Broxupp's

¹ *The Skilled Labourer*, p. 19, quoted by J. L. and B. Hammond.

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farm. Between 18 September and 27 November 1793 and between 17 September and 7 December 1794 respectively, £53 3s. 5d. worth and £66 2s. worth of beef was paid to the colliers, presumably desirous of laying in supplies for Christmas. Ashton and Sykes suggest that money paid to Richard Clay's successor, Elias Elliott, for 'housekeeping' in successive years, were really purchases for payment in kind to the colliers. These sums include £100 on 23 December, 1800, £500 on 11 April 1803, £567 9s. 4d. on 23 July 1804, and £657 in 1806. From 1805 it is known that Broxupp himself began to purchase barren cows from neighbouring farmers—starting with ten the first year, sixteen the next and fifteen in 1808—which seem likely to have been bought as food for the colliers.¹

THE METAL INDUSTRIES

Few people are aware that the tin and copper industries in this country were of such importance in the past that, in the middle of the fourteenth century, one tin miner, known as Abraham the Tinner, employed over three hundred men, women and children,² and that as many as four thousand workers were employed at a Kewswick copper smelting works in the early seventeenth century. Eight hundred people were employed in the Wormley Company for manufacturing brass in 1767. The company had a capital of £200,000.³

The iron industry flourished in the Middle Ages and Tudor period in the Weald of Sussex. Sussex was chosen for iron-forging because of its fine supply of timber for charcoal fuel. Even in the sixteenth century, however, it was realized that its timber would soon be exhausted and laws were made forbidding the erection of new iron works. With the discovery that coal could be used for iron smelting the Sussex iron industry died and a new type of industry sprang up in the 'black' country and the coal-bearing northern counties.

Working units in the iron industry seem to have been comparatively small up to the time of the Industrial Revolution.

¹ Ashton and Sykes, *op. cit.*, p. 145.

² Lewis, *The Stannaries*.

³ Lipson, *Economic History*, Vol. II.

The Metal Industries

Describing an iron works at Furness in before 1755, Lipson writes: 'An ordinary furnace was worked by seven men, of whom two were founders or keepers, three were fillers, and two were bridge-servers. Before 1755, at Furness, the founder earned 10s. a week, the filler 7s. the bridge-server 6s. In addition the employer usually provided a cottage—free or at a low rent—and paid the fees for medical attendance: and the men were stimulated to effort by gifts of ale, since iron-workers 'must be well lined with sack strong beer and good victuals'. Lipson also tells us that 'Richard Reynolds built a school for the children of his workpeople, but the parents would only send them on condition of being paid for their attendance. An indenture for apprenticeship in 1761 binds a boy for three years at six pounds a year and victuals to be paid.¹

An earlier picture of an ironmaster is to be found in the records of the one-time Greenwich ironmonger, Ambrose Crowley. He can hardly, however, be looked upon as typical of his age or his industry. He was a man far ahead of his time as is shown by his detailed book of Laws relating to the running of his business and drawn by himself and his son John. Ambrose Crowley was undoubtedly the greatest ironmaster of the seventeenth century. He had ironworks at Swalwell and Winlaton in County Durham. In many ways his factory was an anticipation of Robert Owen's 'New Lanark'. He began his career as a working blacksmith, became an iron monger at Greenwich and erected a factory at Sunderland in 1682 for making iron ware. He ended up as a knight, an alderman and a sheriff of London. His labour came partly from the south of England and partly from abroad. It was as the result of local opposition to foreign labour that he moved to Swalwell and Winlaton in 1690. 'Here he built up an enterprise which employed several hundred men in operations which ranged from the making of bar iron to the manufacture of finished products.' He laid down over a hundred rules for regulating the conduct of the establishment, including a number which anticipate many modern industrial welfare services such as those for the attendance of a 'doctor and chirurgeon' and for providing pensions for his workers. The firm

¹ Lipson, *Economic History*, Vol. II, p. 169.

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was run partly on the factory system and partly on the domestic system. Those taking part in the latter were called 'outworkmen'. The factory workers dwelt in a place known as the 'Square' which was under the control of a warden, who rang a bell each morning as Crowley's Law Book states, at five 'for beginning of work, at eight o'clock for breakfast, a half an hour after for work again, at twelve o'clock for dinner, at one to work, and at eight at night to ring for leaving work'.

Crowley's system was to supply his workmen with workshops in the 'Square' and raw materials on credit. He then deducted the sums owing for them from the price he paid for the finished article. He seems to have dealt in every sort of ironware from nails upwards and have had a number of Government contracts. He was an autocratic, independent-minded man, but his ideas were far-seeing and practical. He helped to supply his workpeople with necessities, but refused to help them if they ran up debts for liquor. Altogether he is an outstanding 'character' and we feel he deserves his honours. Students of welfare organization in industry would do well to study his methods which show a surprisingly enlightened attitude to his business and a strong sense of responsibility to his workers.

Nevertheless the iron industry was still in its comparative infancy in this country. In 1737 its total output was only 17,350 tons. 20,000 tons were imported this year from Sweden and the Biscayan province. In 1709 Abraham Darby established important iron works at Coalbrookdale. Other large iron works were set up at Merthyr Tydvil in 1755 by Anthony Bacon and at Carron, near Falkirk, in 1760 by John Roebuck.

INDUSTRIAL FEEDING IN AGRICULTURE

One aspect of Industrial Feeding which must not be overlooked is the practice which probably dates back to the early days of tenant farming and mixed 'household' farming of the fifteenth and sixteenth centuries, whereby the farmer fed and housed his labourers at the farmhouse. This is still the practice in the western parts of the United States of America and was until recently the practice in various parts of England. The

Industrial Feeding in Agriculture

Poor Law Report of 1831 states that until the Napoleonic Wars 'it was the habit of the farmer to keep within his own family nearly all the workmen he required, domesticated with his family and subjected to its rules and regulations'. Describing a yeoman farmer's household of the latter part of the eighteenth century the son of the poet Crabbe states: 'His house was large, and the surrounding moat, the rookery, the ancient dovecot, and the well-stored fishponds were such as might have suited a gentleman's seat of some consequence.' In spite of a capacious drawing-room, dining parlour and marble-paved hall which the family only made use of on state occasions, 'at all other times the family and their visitors lived entirely in the old-fashioned kitchen along with their servants. . . . The family dined in this wise: the heads seated in the kitchen at an old table; the farm-men standing in the adjoining scullery, door open; the female servants at a side table called a bouter; with the principals at the table, perchance some travelling rat-catcher, or an occasional gardener in his shirt-sleeves, his face probably streaming with perspiration. . . .'

This example has been quoted as a survival of a system which probably had existed for a century or even two. We have, however, some interesting contemporary evidence as to the feeding of farm workers in the seventeenth century given by Henry Best, who wrote about 1641. Describing a Yorkshire farm he says, 'The best sort of men-shearers have usually 8d. a day and are to meat themselves . . . we use meanes allways to gett either 18 or else 24 peasepullers . . . it is usuall in most places after they get all pease pulled, or the last grain downe, to invite all the worke-folkes and wives (that helped them that harvest) to supper, and then have they puddings, bacon or boyled beefe, flesh or apple pyes, and then creame brought in platters, and everyone a spoone; then after all they have hotte cakes and ale; some will cutte their cake and putte into the creame and this feaste is called creame-potte or creame-kitte. . . .

'The thatchers have in most places 6d. a day and their meat in summer time . . . yett we never used to give them above 4d. . . because their dyett is not as in other places; for they are to have three meale a day, viz. their breakfast att eight of the clocke

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... their dinner about twelve and their supper about seaven or after when they leave worke: and at each meale, fower services, viz. butter, milke, cheese, and either eggs, pycs, or bacon and sometimes porridge insteade of milke: if they meate themselves they have usually 10d. a day.'

Rates fixed at the Quarterly Sessions about 1690 show that men's earnings varied in the hay harvest from: '4d. and meat and drink or 8d. without to 8d. and meat and drink or 1s. 4d. without.'

Women's wages varied in the hay harvest from: '1d. (a day) and meat and drink or 4d. without to 6d. and meat and drink or 1s. without.'

In the corn harvest they varied from: '2d. and meat and drink or 6d. without to 6d. and meat and drink or 1s. without.'

These variations are due to the different prices of corn in various localities.¹

As late as 1802 we find that in parts of North Northumberland farm wages were paid largely in kind. The same system was common in the Lowlands of Scotland. A report of the Society for Bettering the Conditions of the Poor of 1802, states: 'In some parts of Northumberland the year's wages of a servant called Hind are as follows: Three pounds in money, 32 Winchester bushels of oats, 24 ditto of barley, twelve ditto of pease, a ditto of wheat; one cow kept (and frequently found) by the master, permission to keep one pig and from 6 to 8 hens; sufficient quantity of ground wrought and manured to plant three or four bushel of potatoes, according to agreement and house rent free and coal gratis. This, in addition to a female servant (usually his wife or daughter) to clean land, hoe turnips and assist in hay and corn harvest at eightpence a day. This is affluence compared with the situation of a money labourer, subsisting on weekly wages or credit at baker's shop or ale-house.'

It will be seen that many old manorial customs survived long after the end of the Middle Ages. The 'boon work' feast takes the form of an entertainment for harvesters, the payments in

¹ Alice Clark, *Working Life of Women in Seventeenth Century*. 1919.

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kind between villein and lord survive in these Northumbrian and Scottish wages.

At the beginning of the eighteenth century day labourers appear to have been living in clover. Between 1700 and 1729 Chamberlayne computed in *The Present State of Britain* that 'the lowest members, the feet of the body politic, who, by their large wages and the cheapness of all necessities, enjoy better dwellings and apparel in England than the husbandmen or farmers do in many other countries'. From 1735 onwards, however, an addition appeared to this statement in all subsequent issues of the publication, stating that 'The wages of the day labourers being but eight or ten pence a day in counties distant from London, those who have large families find it very difficult frequently to get their bread'.

Defoe, writing in 1705, said, 'The price of labour in England is allowed to exceed all nations in the world . . . in Kent a poor man shall earn from seven to nine shillings a week and in the north four shillings'.

This 'affluence' did not last however and there were periods of great poverty throughout the century.

DEVELOPMENT OF AGRICULTURE

Meanwhile further changes had been taking place in agriculture as a whole. The growing of corn for subsistence had given place to the growing of corn for export. If, as one writer has put it, 'the urban governments of the fourteenth century . . . were at pains to provide a cheap and regular food supply for the masses', the state government of the sixteenth and subsequent centuries were at pains to provide an easy and regular profit to the landlord and large scale farmer—at the general expense of the community. In 1571 appeared the first of the notorious Corn Laws which were finally abolished as the result of tremendous political agitation, after the Hungry Forties of the nineteenth century had driven the poor almost desperate. The theory behind the Corn Laws, which was all part of the mercantile policy of the period, is well described by Dr. Tickner, who writes: 'The Government attempted to regulate the price of corn in such a way as to encourage its growth. The Mercan-

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tile policy, with its desire for ships and men, was naturally favourable to this. If corn could be grown in sufficient quantities for export, there would be employment for English ships and sailors, while the necessary tillage meant plenty of hardy labourers. In 1571 it was enacted that corn could be exported unless expressly forbidden by proclamation; and certain duties on export were fixed. These duties were increased at the Restoration, but were soon reduced owing to high prices. They were reimposed in 1673. After 1688 a period of low prices nearly ruined the landed interest, and the duties on exported corn were not only abolished but were replaced by a bounty of five shillings per quarter on exported corn when wheat was below five shillings per quarter. At the same time the duties on imported corn were kept high, so necessary to the well-being of the country did agriculture seem. Similarly, in 1665 and 1680, the import from Ireland of cattle, sheep and pigs, together with their produce in meat, butter and cheese, was prohibited in the interest of the English farmer.'

Meanwhile a new move was being made for improvements in agriculture in which the newly formed Royal Society played an important part making many useful and profitable suggestions. But the greatest difficulty in the way of improvement was the innate conservatism of the farmers, who objected to new crops and new methods, and tried to retain the customs of their forefathers. Where the land was still open-field, progress was well-nigh impossible; on the enclosed farms there were enlightened agriculturists who were leading the way along better lines.

'During the changes that had been taking place, the villein had finally disappeared. He was now in many cases a copyholder and like his neighbour, the yeoman, held his own estate of from 20 to 150 acres, and in the smaller farms worked it mainly by the help of his family. The yeomanry, who formed something like one-sixth of the population, found in the seventeenth century their golden age. Their estates varied considerably in size and importance; the best of them were scarcely inferior in status to the country gentry. To be counted a yeoman, a man had to possess an income of at least forty shillings a year derived from his own freehold land. An Act of Parlia-

Textiles

ment of 1436 had made this the qualification for the parliamentary vote in the country areas, and the yeomen were proud of this privilege and shewed their independence in the exercise of it. The tenant farmers were also prosperous and occupied a good position though their social status was inferior to that of the yeomanry. As for the labourers, if they were poorly paid they were in most cases well fed, and they still had domestic industries and small holdings of land to help them. Unmarried servants of both sexes lived in the houses of the farms on which they worked, and shared in the food of the households. Married labourers supplemented their wages by domestic industries, and could obtain a portion of their food from the little plots of five or six acres attached to many cottages, and from the possession of a cow which they could graze upon the common lands. Their wives and children shared in this work and also in agricultural work generally. One of the worst hindrances of the labourer was the Act of Settlement of 1662. This prevented his movement from one district to another in search of higher wages and better employment and might mean his having to journey a considerable distance to his work owing to the action of landlords who kept out the undesirable poor by forbidding the erection of cottages upon their estates.¹

TEXTILES

The well-known statute of 1680 which decreed that everyone must be buried in a woollen shroud was a sign of the decline of the woollen industry. Yet in 1613 it was claimed that the four Yorkshire parishes alone of Halifax, Bradford, Bingley and Keighley employed 20,000 people. In 1637 this number had grown to 22,000. In 1638 they produced 70,000 kerseys a year. A kersey is equal to four Leeds broadcloths, and cost 1s. 9d. The majority of those employed were small hand-loom weavers turning out a kersey a week. There were, however, a few big clothiers employing weavers and apprentices, chiefly in the West of England. John Harrison, the Leeds philanthropist . . . who employed weavers on a large scale was an exception to the ordinary type of Yorkshire clothier.

¹ Tickner, *op. cit.*

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In the West the industry was organized on a much more capitalistic basis: the clothiers were 'gentlemen clothier' employers pure and simple—and they did bigger business than their brethren in the north. They employed 30-40 looms or more, some as many as 250. Defoe stated that in Bradford on Avon clothiers worth from ten to forty thousand pounds were not uncommon. It was only a question of the number of weavers available in the immediate district within a radius of about ten miles. In the flourishing Yorkshire cloth industry, Defoe says, 'All were employed from the youngest to the oldest; scarce anything above four years old but its hands were sufficient for its own support'. The hours were long: a fourteen-hour day (including meals) was normal; and in Wiltshire in 1803 the hours were 5 a.m. to 7 p.m. in winter and from 4 a.m. to 9 p.m. in summer. Everywhere the Truck system prevailed by which men were paid not in money but in cheques which had to be spent at shops which the employer owned and where he charged what he liked for inferior goods.

It is among the manufacturers of the West that we have to look for evidence on the problem of industrial catering, as we did in the factory of the famous Jack Winchcombe of Newbury over two centuries earlier. Probably the feeding of operatives in these West country factories was somewhat similar to that described by a medical man named Aikin, in 1795, writing about the conditions prevailing in the establishment of 'an eminent manufacturer' near Manchester towards the end of the seventeenth century.

'An eminent manufacturer in that age', writes Dr. Aiken, 'used to be in his warehouse before six in the morning, accompanied by his children and apprentices. At seven they all came in to breakfast, which consisted of one large dish of water-porridge, made of oatmeal and water and a little salt, boiled thick, and poured into a dish. At the side was a pan or basin of milk, and the master and apprentices, each with a wooden spoon in his hand, without loss of time dipped into the same dish, and thence into the milk pan: and as soon as it is finished, they all returned to work. . . .' Unfortunately Aiken tells us nothing about the midday meal, but we can only hope it was more

General Feeding in the Seventeenth and Eighteenth Centuries

appetizing than the breakfast. He does tell us, however, that the apprentices, often the sons of small country gentlemen, found the evenings so dull that they were driven to spend them in the taverns 'where they acquired habits of drinking that frequently proved injurious in after life'.

The cotton industry of Manchester dates back at least as far as the sixteenth century, and by 1641 was sufficiently flourishing, with the manufacture of linen from Irish yarn, as to be mentioned by Lewes Roberts in his *Treasure of Traffic*. Defoe, in 1727, wrote, 'The grand manufacture which has so much raised this town (Manchester) is that of cotton in all its varieties.' It is true that at one time the coarser woollens were known as 'cottons'. But in this case Defoe was referring to cotton as we know it. By 1774 it is reckoned that 30,000 people were engaged in cotton manufacture around Manchester. This was before the days of the 'Industrial Revolution', and most of them worked in their own homes. From comparative early days Manchester cotton goods were exported, and a large number found their way to London. In the early seventeenth century these included 'Fustians, Vermilions, Dymities and other stuffes'. In 1710, according to a correspondent of Arthur Young's, 'The Manchester trade had long flourished so much that the master manufacturers, instead of their old wooden dwellings of raddlings and daub, had begun to build handsome brick houses, with palisades, pillars and other decorations.'

The main history of the cotton industry belongs to a later chapter. Suffice it to say that the cotton industry of Lancashire grew out of the woollen cloth trade in that district which is supposed to have started with foreign immigrants in the sixteenth century. One of the reasons for its success in that particular locality is generally supposed to be the humidity in the air which is necessary for efficient spinning.

GENERAL FEEDING IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES

In the seventeenth century the rich were still eating as much as ever. The record of a week's purchase of stores for the Woburn household of the Earl of Bedford in April 1654 enumerates:

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	s.	d.
1 bullock of 68 stone	—	—
2 sheep	—	—
1 calf	—	—
1 quarter of mutton	4	6
A side of veal	7	6
10 stone 4 lb. of pork	19	3
1 pig	2	10
2 calves' head	1	10
4 capons	8	6
12 pigeons	5	6
20 lb. of butter	10	0
Eggs	3	0
Crayfish	1	10
A peck and a half of apples	1	9
Bread	1	6
2 pecks oatmeal	2	8
Yeast	1	8
6 bushels of fine flour	—	—

A 'wedding dinner given for John Verney, for seven people', at the Rummer in Queen Street, London, consists of the following items:

	£	s.	d.
Beer-ayle		3	0
Wine		11	0
Orings		1	0
A dish of fish	1	0	0
2 geese		8	6
4 fatt chickens		8	0
2 Rabets		3	0
A dish of peese		6	0
8 hartey Chokes		5	0
A dish of Strabreys		6	0
A dish of Chereys		5	6

One of Pepy's famous dinners to his friends consisted of 'fricassee of rabbits, and chickens, a leg of mutton boiled, three carps in a dish, a great dish of a side of lamb, a dish of washed pigeons, a dish of four lobsters, three tarts, a lamprey pie, a most rare pie, a dish of anchovies, good wine of several sorts, and all things mighty noble, and to my great content'.

Oranges and lemons imported from England's implacable enemy, Spain, had been cried about the streets of London be-

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fore 1600, and we now find them figuring in a number of menus of the more wealthy. In 1612 we find 6s. worth of 'Oringes and Lemons' included among purchases for James I's Star Chamber on Friday, 22 May. Four days later we find the amount had risen to 8s. worth. These list of purchases are interesting as an indication of the food eaten by court officials at the time. The first one being for a Friday contains mostly fish such as 'old Linges 13s. Greenfish 8s. Three Great Pikes 17s. Two small Pikes 8s. Carpes 18s. Eight Tenches 16s. Great Eales 6s. Six Breames 14s. Knobbards 4s. Eighteen Flounders 7s. Roches 14s. Pearches 7s. Fower Troutes 12s. Eight Barbelle 14s. Chevons 4s. Three paires of Soales 8s. Anchoves 3s. 4d. Pickled Oysters 2s. One firkin of Sturgeon 38s. One and a half fresh Salmon 38s. One great Conger 14s. 4d. Two birts and two turbot 18s. Three mullets 8s. One Dorie 4s. Fower great Lobsters 8s. Five Crabbes 11s. Fower long Oysters 10s. Six Plaice 9s. Mackerells 7s. Two fresh Coddess 8s. Whittings 8s. Cockles and Prawns 4s.'

We also learn from these accounts that beef cost 2s. 6d. a stone while 'Three loynes, fower legges, three brests and two necks of mutton' cost 28s. Two breasts and two loins of veal cost 12s. A lamb and a half cost 15s. Eight geese were 18s. 8d., three and a half dozen chicken were 42s., two pheasants were 20s., six 'hearons' were 20s. and twelve tame pigeons 10s.¹

As an indication of another form of Government catering later on in the century we have a record of the army rations between 1660 and 1680. These were good, according to an observer named Thacker, who is quoted in Clifford Walton's *History of the British Standing Army*. According to Thacker, 'Every Monday morning each man receives one piece of beef, one piece of pork, 7 lb. of bread, a quart of pease, a pint of oatmeal besides butter and cheese, for a week's allowance.

'In 1670', continues Thacker, 'the ordinary allowance to a soldier in the field was two pounds of bread, one pound of meat, or an equal weight of cheese, and one bottle of wine or two of beer'.

In the seventeenth century the English middle-classes breakfasted from 6 to 7 o'clock off cold meats, fish, cheese, and ale or beer. They also ate herrings, either dried or salted at this

¹ Drummond and Wilbraham, *op. cit.*,

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time. Pepys invited his friends to a New Year's breakfast consisting of 'a barrel of oysters, a dish of neat's tongues, and a dish of anchovies, wine of all sorts and Northdowne Ale'.

Dinner, eaten about midday, was the main meal of the day. As the century neared its end dinner tended to become later. About 1660, Tickner¹ states: 'Breakfast was now a light meal of bread and butter and ale. Dinner was eaten about one o'clock and was a substantial meal with a wide variety of dishes. Supper was generally only a light meal. Coffee and chocolate were becoming very popular beverages, though tea was still somewhat rare as a drink.' He says a great deal of beer and all kinds of wines were drunk by all classes in the community. Late in the seventeenth century the distillation of gin became an important trade in London and gin drinking rapidly spread to the lower classes, with dreadful effects as portrayed in Hogarth's picture 'Gin Lane'—and as typified by the slogan to be found outside the gin shops, 'Drunk for a penny, dead drunk for 2d., straw for nothing'.

Writing in 1719, a Frenchman named Misson observed that 'the English eat a great deal at Dinner, they rest a while, and to it again, till they have quite stuffed their paunch. Their supper is moderate: gluttons at noon, and abstinent at night'. Sir Jack Drummond mentions as typical dinner dishes: 'Hot shoulder of mutton' a 'good pie baked of a leg of mutton', a 'cold chine of beef', a 'good dish of roasted chickens eaten with bread, cheese, ale or wine'.²

Meals at public eating houses were cheap and generous. For tenpence Pepys, in Charles II's reign, was served with a hot meat dish, bread and ale at an 'ordinary hard by Temple Gate'. About seventy years later Dr. Johnson wrote, 'I dined very well for 8d. . . . at the Pine-apple in New Street. . . . It used to cost the rest 1s. a day for they drank wine: but I had a cut of meat for 6d., and bread for a penny and gave the waiter 1d. . . .' An Irish painter told Johnson that £30 a year was sufficient to live on in London without being contemptible. He allowed 'ten pounds for cloaths and linen . . . he might dine for 6d., break-

¹ *Industrial and Social History of England*, p. 357.

² Drummond and Wilbraham, *op. cit.*

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fast on bread and milk for 1d. and do without supper . . . on clean shirt days he went abroad and paid visits. . . .’ Boswell estimated that double the money would be needed in 1791.

In the early eighteenth century the journeyman tailor’s wage was said to average 9s. a week throughout the year of which his expenses for himself alone amounted to 8s. 6d. (without clothes, sickness and other incidentals).

	s.	d.
For breakfast (more than the master’s allowance)	0	$\frac{1}{2}$
For meat, drink and bread for dinner	6	
On the shopboard, in the afternoon, a pint of beer	1	$\frac{1}{2}$
Bread, cheese and beer for supper	3	
One day’s expenses	11	
The other five days’ expenses	4	7
Sunday’s expense	1	0
Lodging for a week	1	0
Washing „		8
Shaving „		4
	8	6 ¹

Interesting light is thrown on the cost and conditions of living in a large town in the eighteenth century by two documents. One is the budget drawn up by a London clerk to prove that wages in the towns are far too low. His own comment on his budget, which he puts at a minimum for respectability, is that it feeds the clerk ‘even worse than a day labourer feeds himself’. His budget, drawn up in 1767, reads as follows:

	s.	d.
Breakfast: bread and cheese and small beer		2
Dinner: chuck of beef or scrag of mutton or sheep’s trotters or pig’s ear soused; cabbage or potatoes or parsnips, bread and small beer with $\frac{1}{2}$ pint of porter		7
Supper: Bread and cheese with radishes or cucumber or onions		3
small beer and half a pint of porter		1 $\frac{1}{2}$
	1	1 $\frac{1}{2}$
Per week	7	10 $\frac{1}{2}$
An addition repast on Sunday		4
	8	2 $\frac{1}{2}$ ²

¹ Galton, quoted Lipson, Vol. III, p. 403.

² M. D. George, *English Social Life*.

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The second document is from Robert Owen's autobiography in which he describes his life as a shop assistant in 1786, with Messrs. Flint and Palmer, a cash sales haberdasher on the Borough side of London Bridge, when he was fifteen. Owen states that he was boarded and lodged in the house and paid £25 a year. 'The assistants were up and had breakfasted and were dressed to receive customers at 8 o'clock. . . . Dinner and tea were hastily taken—two or three, sometimes only ones escaping at a time to take whatever he or she could the most easily swallow. . . . The only regular meals at this time were our breakfasts, except on Sundays, on which days a good dinner was always provided and much enjoyed.' After the bustle of the spring trade which often kept the assistants up until 1 a.m. tidying up the shop, Owen says, 'business gradually became less onerous. We could take our meals with some comfort and retire to rest between eleven and twelve, and by comparison this became an easy life'.

By way of contrast let us turn to the menu for the Lord Mayor's Day dinner of 1774:

Fine hams, about 20 lb. each
Fourteen boyl'd fowls
Twenty-six roast fowls
Three boyl'd turkies and oysters
Three roast turkies
Three geese
Twenty-four ducks
Eight mince pies and ten marrow puddings for the company
3 lb. of Epping butter
2 lb. of Gloucester and 2 lb. of Cheshire cheese
Twenty-one quartern loaves and twenty-one quartern bricks
Eighteen gallon cask small beer
Three loaves of sugar
Eighteen bunches of sprouts
Sage and onions
Some beetroot and one bunch of carrots
Two bunches of turnips
One dozen sticks of horseradish to be scraped
Five dozen of red port
Three dozen of white
Six gallons of brandy to be made into punch
Two hundred and fifty lemons
Two bushels of golden pippings

Workhouses

INSTITUTIONAL FEEDING

The poor were not eating quite so much as is shown by 'the new diet table' approved by the Governing Body of St. Bartholomew's Hospital in April 1687 as follows:

Dyett appointed.

Sunday	10 ounces of Wheaten Bread 6 ounces of Beefe boyled without bones 1 pint and a halfe of Beef Broth 1 pint of Ale Cawdell 3 pints of 6-shilling Beere
Monday	10 ounces of Wheaten Bread 1 pint of Milk Pottage 6 ounces of Beefe 1½ pints of Beefe Broth 3 pints of Beere
Tuesday	10 ounces of Bread Half a pound of Boyled Mutton 3 pints of Mutton Broth 3 pints of Beere
Wednesday	10 ounces of Bread 4 ounces of Cheese 2 ounces of Butter 1 pint of Milk Pottage 3 pints of Beere
Thursday	The same allowance as Sunday 1 pint of Rice Milke
Friday	10 ounces of Bread 1 pint of Sugar Soppes 2 ounces of Cheese 1 ounce of Butter 1 pint of Water Gruell 3 pints of Beere
Saturday	The same allowance as Wednesday

An analysis made by Sir Jack Drummond shows it was not a bad diet apart from the lack of fruit and vegetables.

Somewhat similar was the diet of the children of Christ's Hospital in 1678.

Sunday	Noone	Boyled beefe and poradge with 5 oz. of bread
	Att night	Roast Mutton (The Public Supping)

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Monday	Noone	Water grewell with currants
	Night	Cheese
Tuesday	Noone	Boyled beefe
	Night	Cheese
Wednesday	Noone	Milk porrage, bread and butter
	Night	Pudding pyes without bread
Thursday	Noone	Boyled beefe
	Night	cheese
Fryday	Noone	Milk porrage bread and butter
	Night	Pudding pyes without bread
Saturday		Milk porrage with bread and butter
		at noone
	Night	cheese
Every morning 2½ oz. of bread and a suppe of drink, 5 oz. bread att every meal, dyner and supper.		

WORKHOUSES

Among the earliest Acts requiring the poor to be set to work was that of 1575 which was passed 'to the intent youth may be accustomed and brought up in labour and work, and thus not like to grow to be idle rogues, and to the intent also that such as be already grown up in idleness and so (be) rogues at this present day may not have any just excuse in saying that they cannot get any service or work . . . and that other poor and needy persons being willing to work may be set on work' and ordered the provision of materials such as hemp, flax, wool, iron 'or other stuff' from which the poor might make goods to be sold to buy more material and pay for their maintenance. In Norwich, in 1571, we find strict ordinances against begging and orders 'that not any person or persons shall sustain any such beggars at their doors'. Most interesting of all we find provision 'that at the house called the Normans in the convenientest place therefore, shall be appointed a working-place, as well for men as for women, viz. for the men to be prepared fourteen malt guerns to grind malt and such exercises; and for the women to spin and card and such exercises.

'Which working place shall contain to set twelve persons, or more upon work, which persons shall be kept as prisoners to work for meat and drink for the space of twenty and one days at the least and longer if cause serve, and they shall not eat but

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as they can earn (except some friend will be bound for them) that the city shall no more be troubled with them . . . which persons shall begin their works at five of the clock in Summer . . . and shall end their work at eight of the clock at night and in winter to begin at six of the clock . . . and to end at seven of the clock or half an hour past with the allowance of one half-hour or more to eat and a quarter of an hour to spend in prayer . . . and those that shall refuse to do these works to them appointed or keep their hours to be punished by the whip at the discretion of the wardens or bailiff of the house.'

In the same town we find instructions 'for the Bailiff of Bridewell' to 'take charge of such vagabonds, men and women as to them shall be committed, enforcing them to work by the hours aforesaid . . . and to take of them for their victual, and fuel or other necessities as the price shall be rated and there set up'. It is further laid down that 'the said Bailiff shall be allowed for himself, his wife, servants and surveyors . . . for meat drink and wages thirty pounds by year, whereof he shall pay forty shillings a year to a priest to minister service twice a week'.

Further orders for 'children and others in ward' state that 'women, maidens or children . . . shall be driven to work and learn, by the hours appointed in Bridewell and with such corrections, till their hands be brought into such use and their bodies to such pains as labour and learning shall be easier to them than idleness'.¹

It will be seen that 'houses of correction' and workhouses were very much the same at this time and for a long time no great distinction was drawn between them. It is interesting therefore to read in the 'Orders for the House of Correction at Bury, Suffolk, anno 1588' what diet was appointed for the inmates.

'There, it is ordered that every person committed to the said house shall have for their dietts, their portion of meate and drinke followinge, and not above. At every dinner and supper on fleshe daies, bread made of rye, viii ounces troye weight, with a pynte of porridge, a quarter of a pound of fleshe, and a pinte of beare, of the rate of iijs. a barrell, every barrell to conteyne

¹ Tawney, Bland and Brown, *English Economic History*, 'Select Documents'.

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xxxvj. gallands; and on every fyshe daie at dynner and supper the like quantitie, made eyther of milk or pease or such lyke, and the thurd part of a pount of cheese, or one good heringe, or twoe white or redd, according as the keeper of the house shall thinke meete.'¹

In 1601, as we have seen, the Elizabethan Poor Law was finally summarized and codified in a form survived in the main until 1834. The first 'workhouse' as distinct from a 'house of correction' was set up in Bristol in 1697.²

Until 1722, however, a special Act of Parliament was required for each workhouse established.

The diet for the workhouse at Bishopgate Street, London, round about 1725, as given by an observer, reads as follows: 'They have Breakfasts, dinners, and suppers every day in the week. For each meal 4 oz. of bread, 1½ oz. cheese, 1 oz. butter, 1 pint of beer. Breakfast four days, bread and cheese or butter and beer. Monday a pint of pease pottage, with Bread and Beer. Tuesdays a Plumb Pudding Pye, 9 oz., and beer. Wednesdays a pint of frumity. On Friday a pint of barley broth and bread. On Saturdays a plain flower sewet Dumpling with beer. Their supper always the same, 4 oz. bread, 1½ oz. cheese or 1 oz. of butter and beer sufficient.'³

Sir Jack Drummond gives it, as his opinion, that workhouses fed their inmates fairly well in the early part of the eighteenth century. He quotes the report of a prominent citizen of Bristol named Cary, in 1714, as stating that the Governors 'appointed their diets to be made up of such provisions as were very wholesome, afforded good nourishment and were not costly in price, viz. beef, pease, potatoes, broath, pease-porridge, milk-porridge, bread and cheese, good beer (such as we drank at our own tables), cabbage, carrots, turnips, etc., in which we took the advice of our physician, and bought the best of every sort. 'They had three meals every day, and as I remember, it stood us (with soap to wash) in about 16d. per week for each of the

¹ Drummond, *op. cit.*, p. 64.

² Tickner, *op. cit.*, p. 552.

³ Accounts of several workhouses for employing and maintaining the poor. London, 1725.

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100 girls. We soon found the effects of their change of living. Nature being well supported, threw out a great deal of foulness, so that we had generally twenty down at a time, in the meazles, small pox, and other distempers; but by the care of our physician, and the blessing of God on his endeavours, we never buried but two, though we have had seldom less than 100 in the house at any time.'

About the same time, at Bedford, Sir Frederick Eden observed that the workhouse food was better than the most industrious labourer, either then or in 1797, when he wrote, could afford himself at his own habitation. The weekly diet he referred to was:

	<i>Breakfast</i>	<i>Dinner</i>	<i>Supper</i>
Sunday	Bread and cheese	Boiled Beef and suet pudding	Bread and cheese
Monday	Broth	Cold Meat left on Sunday	Same
Tuesday	Bread and cheese	Boiled beef and a little mutton and suet pudding	Same
Wednesday	Same as Monday	Same as Monday	Same
Thursday	Same as Tuesday	Same as Tuesday	Same
Friday	Same as Monday	Same as Monday	Same
Saturday	Bread and cheese	Hasty pudding or milk porridge	Broth or Bread and cheese

A note states that the bread was 'wheat dressed down and made into large household loaves by a woman in the house'. They drank beer 'turned in from the public brew house at three half-pence per gallon'. A cow was occasionally put on the common for them and a little garden for herbs and onions.

In 1794, at Heckingham, Norfolk, Eden found the diet to be:

	<i>Breakfast</i>	<i>Dinner</i>	<i>Supper</i>
Sunday	Bread and cheese and butter or treacle	Dumplings, Butcher's meat and bread	Bread and cheese or butter
Monday	Same as Sunday	Broth and bread	ditto
Tuesday	Milk and water gruel and bread	Baked suet pudding	ditto

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Wednesday	Same as Sunday	Dumplings and milk broth, or milk and water gruel	ditto
Thursday	Same as Tuesday	Same as Sunday	ditto
Friday	Same as Sunday	Same as Monday	ditto
Saturday	Same as Tuesday	Bread and cheese or butter	ditto

The men are allowed a pint of beer each at any meal except when they have broth or gruel. Women with children at the breast have the same allowance.

It appears that the diet of southern workhouses and institutions was nearly always made up of bread, meat, cheese, and beer. Large amounts of milk and a regular ration of potatoes were features in the north. In 1793, at Carlisle workhouse, inmates got 'Hasty pudding' with milk or beer for breakfast; meat three times a week for dinner with potatoes and milk or bread and milk on the other four days: while for supper they got bread and cheese or broth. Beer was served at most meals. Both 1793 and 1795 were bad years of scarcity yet in the latter the Liverpool authorities purchased 3640 gallons of fresh milk and the same amount of skimmed milk for the workhouse. 1500 lb. of potatoes and 384 lb. of turnips were also purchased weekly at this workhouse.

Turning to charitable institutions we find in Stow's *Survey of London*, brought up to date in 1720 by J. Strype, the Children's Diet in Christ Church Hospital for the year of 1704. It reads:

<i>For Breakfast</i>	Bread and beer
<i>For Dinner</i>	Sunday, Tuesday and Thursday, boiled beef and pottage. Monday, milk pottage. Wednesday, furmity. Friday, old pease and pottage. Saturday, water gruel
<i>For Supper</i>	Bread and cheese, or butter for those who cannot eat cheese
<i>Sunday Supper</i>	Legs of mutton
<i>Wednesday and Friday</i>	Pudding pies

The diet of the children in the Foundling Hospital in November 1747 was, as follows:

Workhouses

	<i>Breakfast</i>	<i>Dinner</i>	<i>Supper</i>
Sunday	Broth	Roast Pork	Bread
Monday	Gruell	Potatoes	Milk and Bread
Tuesday	Milk Porridge	Boiled Mutton	Bread
Wednesday	Broth	Rice and Milk	Bread and Cheese
Thursday	Gruell	Boiled Pork	Bread
Friday	Milk Porridge	Dumplings	Milk and Bread
Saturday	Gruell	Hasty Puddings	Bread and Cheese

This was in the Pork Season. In other seasons the fare was:

Sunday	Broth	Roast Beef	Bread
Monday	Gruell	Potatoes	Milk and Bread
Tuesday	Milk Porridge	Boiled Beef	Bread
Wednesday	Broth	Rice Puddings	Bread and Cheese
Thursday	Gruell	Boiled Mutton	Bread
Friday	Broth	Suet puddings	Milk and Bread
Saturday	Gruell	Hasty puddings	Bread and Cheese

On October 17th yearly the Governors decreed that the children should have a holiday and 'Rost beef and Plumb pudding for Dinner to celebrate the date of the Charter'.

The Staff diet made up for the lack of vegetables given to the children by containing plenty, namely:

Upon Sundays	Roast Beef
„ Mondays	Stewed Beef with Turnips and Carrotts
„ Tuesdays	Roast Mutton
„ Wednesdays	Boiled Beef with Greens or Roots or Pork with Pease Pudding in Winter or Shoulders of Veal in Summer
„ Thursdays	Stew'd Beef with Turnips and Carrotts
„ Fridays	Roast Mutton
„ Saturdays	Boiled Beef with Greens or Roots, or Pork with with Pease Pudding in Winter and Shoulders of Veal in Summer

The Staff were to have a pound of food per head per day. Breakfast and Suppers were to be Milk, Milk Porridge, Rice Milk or Bread and Cheese. In 1762, fifteen years later, the children are given vegetables. Their diet was:

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	<i>Breakfast</i>	<i>Dinner</i>	<i>Supper</i>
Sunday	Bread and Butter	Roast Beef Greens	Milk Porridge
Monday	Gruel	Potatoes or Parsnips mashed with milk	Bread and butter
Tuesday	Milk Porridge	Boiled beef and Greens	Broth
Wednesday	Bread and Milk	Stewed shins of Beef and Broth with herbs and roots	Milk Porridge
Thursday	Gruel	Mutton and Greens	Broth
Friday	Milk Porridge	As Wednesday	Bread and Cheese
Saturday	Bread and Milk	Rice Pudding	Gruel

Charles Lamb's description of the food at Christ's Hospital between 1782 and 1789 is not appetizing:

' . . . While we were battenning upon our quarter of a penny loaf—our "crug"—moistened with alternated small beer, in wooden piggins smacking of the pitched leathern jack it was poured from. Our Monday's milk porritch, blue and tasteless and the pease soup of Saturday, coarse and choking. . . . The Wednesday's mess of millet somewhat less repugnant (we had three banyan to four meat days in the week). . . . Our "*half pickled*" Sundays, or quite fresh boiled beef on Thursdays (strong as *caro equina*), with detestable marigolds floating in the pail to poison the broth—our scanty mutton scraps on Fridays—and rather more savoury but grudging portions of the same flesh, rotten roasted or rare, on the Tuesdays, the only dish which excited our appetite, and disappointed our stomachs in almost equal proportions.'

'Banyan' days were meatless days called, as Smollett says in *Roderick Random*, after a tribe of vegetarian East Indians.

In 1767 Jonas Hanway advocated a greater use of vegetables in diet and less of meat. 'With the addition of legumens, roots and vegetables, five pounds weight of meat will go as far as we generally make ten or fifteen and the consumer will be more free of the scurvy, and not less fit for the laborious offices of life.'

Workhouses

As a recipe for feeding five stout men or ten common persons, including women and children, he suggested:

1 lb. lean beef
1 pint of split peas
12 oz. of mealy potatoes
3 oz. of ground rice
3 large leeks
2 heads of 'salary' and salt
9 pints of water

Sir Jack Drummond's commentary on this meal is that it would, in fact, not provide sufficient calories to enable one 'stout man' to carry out a day's manual work.

In 1776 William Smith, reporting on the gaols in London, described conditions of feeding naval prisoners in the hulks at Woolwich:

'They eat in messes. Each mess, which consists of six convicts, has an allowance of half a bullock's head, four pounds of biscuits, and broth thickened with bread and oatmeal, every twenty-four hours. Sometimes, though rarely, they have hearts and shins of beef. They calculate . . . that from three ounces to half a pound and upwards of meat come to each man's share daily. . . . Their flesh meat, as they inform me, is not at all times sweet, but even green with rottenness. The biscuit, which is the only bread they have, is made of the third or coarsest part of the plant and is very unwholesome.'

The rations in the Navy in 1745 are given by Drummond and Wilbraham, quoting Admiralty regulations, as follows:

Sundays and Thursdays	1 lb. biscuits, 1 gallon of beer, 1 lb. pork, $\frac{1}{2}$ pint of pease
Mondays	1 lb. biscuits, 1 gallon of beer, 1 pint of oatmeal, 2 oz. butter, 4 oz. cheese
Tuesdays and Saturdays	1 lb. biscuits, 1 gallon of beer, 2 lb. beef
Wednesdays and Fridays	1 lb. biscuits, 1 gallon of beer, $\frac{1}{2}$ pint of pease, 1 pint of oatmeal, 2 oz. butter, 4 oz. cheese

Unfortunately these amounts, which on paper provided about 4,000 to 4,500 calories, according to Drummond, were gener-

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ally cut by the purser to cover wastage through various causes including vermin.

So bad was naval food that it caused a mutiny in 1797. The salt meat was so hard that men carved snuff-boxes out of it as well as other trinkets.¹

As everyone knows, scurvy was a common disease at sea until lime and lemon juice were given as anti-scorbutics from 1795 onwards, which caused English seamen to be known as 'limeys' by the Americans, who still use the term when speaking of Englishmen.

In 1757, however, when the Admiralty were still trying to find a remedy against scurvy, they issued a direction on diet referring to the practice of certain pursers 'as often as their ships were victualled with fresh meat to boil such a quantity of greens or roots with it as to give sufficient satisfaction to the men', and ordering that 'all Commanders are to take care that their pursers comply . . . by furnishing a sufficient quantity of roots and greens to seamen'.

¹ Drummond, *op. cit.*, p. 313.

Chapter V

THE INDUSTRIAL REVOLUTION

THE AGRICULTURAL REVOLUTION

The most important event in the agricultural development of the eighteenth century was the introduction of turnips as a field crop, which is generally attributed to Lord Townshend, who took to agriculture as a solace for his political incompatibility with Robert Walpole. From the point of view of food supply the development of root crops in England effected a fundamental revolution; because it solved at last the perennial problem of the winter feeding of cattle and sheep.

It was no longer necessary to kill off all but the best cattle as soon as autumn came round. Cattle could now be turned out as soon as the roots were grown to eat the tops. By 1750 the roots were fed to the cattle in the stable.

Other improvements in agriculture were the introduction of clover and sainfoin in place of fallow which added, according to reliable estimates, one-third more to the arable land of England.

Other garden crops which became field crops in the eighteenth century beside turnips were carrots, potatoes and cabbages.¹

At the same time great strides were being made in stock breeding, and the weight of the fatted ox was increased three-fold by the end of the eighteenth century compared with what it had been at the beginning.

Population was rising steadily and in 1765 England became a wheat importing as opposed to a wheat exporting country.

¹ Moffit, *England on Eve of Industrial Revolution*, p. 8.

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Population figures from 1700 to 1801 are generally believed to be as follows:

1700	5,475,000
1710	5,240,000
1720	5,565,000
1740	6,064,000
1760	6,736,000
1780	7,953,000
1790	7,675,000
1801	8,892,536

In 1767, owing to the high price of wheat, the corn laws restricting its imports were suspended. The last of these laws, that of 1671, had permitted wheat to be imported only when its price reached 48s. a quarter. In 1791 a new corn law imposed a duty of 24s. a quarter on the import of wheat when its price was below 50s. and a slighter duty when it rose above this figure. In this year the quartern loaf was 6½d. Four years later it had risen to 12¼d., while a quarter of wheat had risen to 104s. 'Many of the poor', says Thorold Rogers somewhat laconically, 'perished by want.' The poor rate had risen to £4,000,000 for the year 1795—but the people, as Rogers says, were starving.

From 1808 to 1813 the home price of wheat never fell below 95s. 8d. The war made importation impracticable owing to the high freight charges.

In 1815 imports were shut out until the price rose to 80s. a quarter. In 1790 a labourer's weekly wage purchased 82 pints of wheat, in 1800 it procured 53 pints. The skilled artisan in 1790 got 169 pints against 83 in 1800.

DEVELOPMENT OF INDUSTRY

During the eighteenth century technical changes were going on in English industry as a whole. In 1733 John Kay introduced the 'flying shuttle' in the cotton industry which had increased the size of cloths which could be made on the handloom and also their speed of manufacture. In 1674 James Hargreaves invented the 'spinning jenny' which greatly increased the speed and output of spinning. In 1769 Richard Arkwright borrowed ideas already used by Lewis Paul and John Wyatt and brought

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out his water spinning-frame which used rollers to draw out the thread and so strengthened it. It was also capable of being driven by water-power, while its thread was strong enough to be used for warp, making possible the manufacture of pure cotton goods. In 1779 Samuel Crompton, a spinner of Bolton, combined Arkwright's frame and Hargreaves' jenny in the 'mule' or 'muslin wheel', which made it possible, for the first time in England, to spin cotton fine enough for muslin. In order to make use of all the yarn which could not be spun a power loom was invented in 1785 by a Kentish clergyman named Cartwright. It did not, however, come into general use until about 1813.

Other inventions had also appeared for simplifying and speeding up various subsidiary processes in cotton manufacture while a new source of power had arisen in 1765 in the steam engine invented by James Watt. Watt's engine was first used in a cotton mill in 1785 in Nottinghamshire, whereupon it soon came into general use throughout the industry.

The iron and steel industries, as we have seen, had made little progress up to the middle of the eighteenth century. An attempt in 1619 to use coke for melting iron had not proved commercially successful. It was left to Darby to inaugurate the blast furnace, using coal and coke at his iron works at Coalbrookdale, which after 1756 became successful. In 1788 a steam engine was used at Roebuck's works at Carron to make the blast. From then on iron and steel production made rapid progress.

Transport was abominable at the beginning of the eighteenth century and the roads a disgrace to a civilized country. The turnpike Acts did much to improve them, but we owe our road system to-day mainly to three great roadmakers, John Metcalf, or the famous 'Blind Jack of Knaresborough', who laid out hundreds of miles of roads in Yorkshire, designed bridges and viaducts and supervised their building without being able to see a stone or a stick since he was six years old; William Telford, the surveyor, and Robert McAdam, engineer. Canals were also increasing to ease the transport situation and eventually in 1825 came railway transport. This year also marked the

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occasion of the first steamship to arrive from America at Liverpool.

The best picture of the industrial condition of Great Britain in the first half of the nineteenth century is that given in Professor J. H. Clapham's *Early Railway Age* volume of his *Economic History of Modern Britain*. An idea of the size of the cotton weaving industry is given by the fact that a parliamentary select committee put the total number of power looms in England and Scotland in 1830 at between 55,000 and 60,000 as against 240 handlooms. In the silk industry as early as 1769, Thomas Lombe's mill at Cromford had employed 'near 2,000 people at six engines'. Later these mills were taken over by cotton manufacturers of whom the best known was Arkwright. In the iron industry by 1830 between 250 and 300 blast furnaces were in use, producing an output of 650,000 to 700,000 tons. Over two-fifths of this came from South Wales and about a third from Staffordshire.

The size of the average steam spinning mill about 1815 to 1816 can be shown by the fact that forty-one mills in Glasgow averaged 244 workpeople in each. Three mills owned by James Finlay and Co. averaged over 500 and Dale and Owens mill at New Lanark employed over 1,600. The Strutts at Belper and Millford employed 1,494. Forty-three important mills in the Manchester area averaged 300 workers, two of these employed over 1,000 people. In 1832 a similar list of mills averaged nearly 401. In 1816 Messrs. Monteith, Boyle and Co. of Glasgow had 4,000 workers employed both in weaving and spinning as well as other subsidiary processes. Messrs. Horrocks, Miller and Co. of Preston employed nearly 7,000 of whom 700 were spinners in four separate mills.

Wedgewood's pottery works at 'Etruria' employed 387 people in 1816. Nine years later the second biggest shipbuilder on the Thames employed 230. In 1815 the average number of men, women and boys employed in a coal-mine was about 80. In 1800 Wallsend Colliery was believed to turn out 160,000 tons yearly. In 1830 forty-one Tyneside collieries had an output between 2,250,000 and 3,000,000 tons a year and a working force of about 12,000 below and above ground: making an average of

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60,000 to 70,000 tons and 300 workers to a mine of which 200 or so worked below ground. Clapham suggests Weardale figures were even higher.

In the iron-working industry the Carron works employed 2,000 men in 1814 as compared with the average team of 20 per foundry in Scotland. In 1812 ten Black Country ironworks were said to have cost £50,000 each to erect. A company near Bradford employed 1,500 men, including colliers, in the 1820's. In 1824 Walker and Yates employed 700 men at Gospel Oak, Staffs, and 1,300 more colliers and iron stone-getters. They used seven steam engines with an aggregate of 350 horsepower. William Matthews, in 1833, employed 400 to 500 men near Dudley. Antony Hill at Merthyr employed 1,500 or so men to turn out 20,000 tons of bar iron yearly.

In glass making the firm of Cooksons are reckoned to have had an output in 1833 of over 8,000 tons. William Chance of Stourbridge probably turned out about 700 tons. The average 'glasshouse' at this time turned out about 1,200 tons of bottle glass, 160 tons of flint glass and 120 tons of crown or sheet glass. An interesting sidelight on the glass-making industry about 1790 is given by the sisters Hannah and Martha Moore who, at the instigation of Wilberforce, started a mission of reclamation among the inhabitants of some of the Mendip villages who were chiefly glass workers and cutters. One village was known as 'Botany Bay' or 'Little Hell'. In another place wages were 1s. a day. In a third two hundred people were crammed into nineteen houses. 'We have one large parish of miners so poor that there is not one creature in it that can give a cup of broth if it would save a life.' Of the overcrowded glass workers in the nineteen houses they write in *Mendip Annals*: 'Both sexes and all ages herding together; voluptuous beyond belief. The work of a glass-house is an irregular thing, uncertain whether by day or by night. . . .

' . . . The wages high, the eating and drinking luxurious—the body scarcely covered, but fed with dainties of a shameful description. The high buildings of the glass-houses ranged before the doors of these cottages—the great furnaces roaring, the swearing, eating and drinking of these half dressed, black-look-

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ing beings gave it a most infernal and horrible appearance. One, if not two, joints of the finest meat were roasting in each of the little hot kitchens, pots of ale standing about, and plenty of early, delicate looking vegetables.’¹

Many of the London breweries employed large numbers of operators. The new gas companies also employed a considerable labour force.

Nevertheless a large proportion of British industry, even in 1830, was still carried on by small masters working on the domestic system, or by small factories employing under fifty hands.

It is impossible to go into full details of the organization of industry at this time. The figures given above should, however, give a rough indication of the way the main industries were developing.

SOCIAL EFFECTS OF MACHINERY

The effects of these developments on the social and industrial life of England were tremendous. First of all the factory system, which we have seen as an isolated phenomenon of the past, became the generally accepted method of manufacture: particularly was this so in the textile industries where great advantages could be obtained by gathering large numbers under one roof, where power could be laid on by water or steam to the new machinery.

One of the features of Hargreaves’ spinning jenny was that it was ‘so simple that it could be worked by children’. Four power looms could be worked by one girl of eighteen round about 1790. We have already seen that provisions were made under the Elizabethan Poor Law and its later developments to farm out children as ‘parish apprentices’. Cotton manufacturers saw in this a good opportunity to get cheap labour. The old regulations of the Guilds restricting the number of apprentices had fallen into abeyance and, in any case, the new factories were set up in country districts, outside Guild and Municipal jurisdiction, where water could be readily obtained. The parish authorities were only too glad to get the poor children off their hands,

¹ Quoted from *The Mendip Annals* by Hannah and Martha Moore by J. L. and B. Hammond in *The Town Labourer*.

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and in some cases contracted that for every twenty sound children, one idiot should be accepted by the factory owners.¹ A description by a contemporary writer gives a vivid picture of the results of this arrangement, which unfortunately is not exaggerated. Evidence taken by the Royal Commission on Employment in factories and mines amply confirms everything stated by this writer.

CHILDREN IN INDUSTRY

These quotations from the *History of the Factory Movement*, 1802-47, written by Samuel Kydd under the pseudonym of 'Alfred', among other things throw some interesting light on industrial feeding. 'Under the operation of the factories apprentices system, parish apprentices were sent, without remorse or inquiry from the workhouses in England, and the public charities of Scotland to the factories to be "used up" as the cheapest raw material in the market. . . . The general treatment of those apprentices depended entirely on the will of their masters; in very many instances their labour was limited only by exhaustion, after many modes of torture had been unavailingly applied to force continued action; their food was stinted, coarse and unwholesome. . . .' According to Robert Blincoe, who wrote a memoir on life as a pauper apprentice, the children were told before being transported to the factories that 'they were all, when they arrived at the cotton mill, to be transferred into ladies and gentlemen; that they would be fed on roast beef and plum pudding. . . .' Describing the actual conditions 'Alfred', or Samuel Kydd, writes, 'The scantiest share of coarsest food capable of sustaining animal life has been day by day doled out to the "parish apprentices"; in the bothies and outhouses of cotton factories, boys and girls, suffering from the unsatisfied cravings of hunger, have stealthily struggled with the pigs for food, and have been fed upon the purloined contents of the pig-trough.' He quotes from Robert Blincoe's account of his own experience, who stated: 'The store pigs and the apprentices used to fare very much alike; but when the swine were hungry, they used to grunt so loud, they obtained the wash first to quiet

¹ Hansard, 6 June 1815. Horner's Speech.

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them. The apprentices could be intimidated and made to keep still. The fatting pigs fared luxuriously compared with the apprentices. They were often regaled with meal balls, made into dough, and given in the shape of dumplings.' Blincoe and others, we are told, who worked in a part of the mill whence they could see the swine served, used to say to one another, 'The pigs are served, it will be our turn next.' 'Those who were in a part of the building contiguous to the pigsties used to keep a sharp eye upon the fatting pigs and their meal balls, and, as soon as the swineherd withdrew, Blincoe used to slip downstairs, and stealing slyly towards the pig-trough, plunge his hand in at the loopholes, and steal as many dumplings as he could grasp. The food thus stealthily obtained from the pig-trough was exultantly conveyed to a hiding place and there greedily devoured. The pigs . . . learned by experience to guard their food by various expedients; made wise by repeated losses, they kept a keen lookout, and the moment they ascertained the approach of the half-famished apprentices they set up so loud a chorus of snorts and grunts, it was heard in the kitchen, when out rushed the swineherd armed with a whip from which combined means of protection for the swine, this accidental source of obtaining a good dinner was soon lost.' 'Such was the contest', comments 'Alfred', 'carried on for some time at Litton Mill between the half-famished apprentices and the well-fed swine.'

So appalling were the conditions that, in addition to a number of suicides, irons had often to be riveted on the children's ankles to prevent them running away. These irons were linked by chains to their hips, and in these fetters girls as well as boys had to walk to and from the factories.

Other descriptions are reminiscent of revelations concerning European concentration camps during the second World War. 'There are those still living', wrote Kydd in 1857, 'who can point out the spots where there were buried the remains of those who were once their fellow companions in wretchedness. . . . Many having died in the night, their bodies were stealthily removed and were buried in graves unknown to their former comrades . . . these bodies were cast into the earth, and buried with "the burial of an ass".'

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Kydd quotes a clergyman of the Church of England as vouching for the statement of a woman, who, forced to send her child to work in a factory, took lodging next to an 'apprentice house', as the establishments were called where these unfortunate outcasts were housed. 'And there it was that A—— and her mother became fully acquainted with the horrors of the abominable system', we are told. The girl, A—— S—— and her mother, confirmed frequently that these 'wretched victims of heartless avarice, the factory apprentices, were fed chiefly on porridge, which was seasoned with beef or pork "*brine*" bought at the government stores, or those of contractors—the "*bottoms*" of casks supplied to the navy. This nauseous mixture was sometimes so repulsive even to the hungry stomachs, that it was rejected. Whereupon, the overseer or overlooker was accustomed to stand over the apprentices with an instrument of punishment, a whip, or thong, or cow-hide, as the case might be, and compel them to swallow the disgusting diet. They were fed out of troughs much resembling those used by pigs. There were among them delicate, intelligent young people, evidently cast-offs and outcast of genteel progenitors but all wretched and reckless to the utmost degree.'

'The deaths which occurred', continues the horrifying narrative, 'were not unfrequently from cruel punishment, at work or in the prentice house. . . . A plantation hard by was believed to to be the resting-place from their sorrow of many who disappeared.'

Evidence taken from a survivor of these apprentices known as 'Old Nanny', in 1833, states that 'the cries of the poor wretches under the lash of the overseer were heartrending. She and others had often heard them especially at feeding-time'.

Not only parish apprentices, but later even the children of the working poor themselves were treated like slaves and beasts of burden. As is shown by the evidence of numerous children, parents, overseers, and others taken by various Commissions on Employment and General conditions in factories at this time. Among such is Joseph Haberman's evidence before the Sadler Committee. He was employed at George Addison's Bradley Mill, near Huddersfield. He was seven when he started work:

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the hours of labour were 5 a.m. to 8 p.m. with an interval for rest and refreshment at noon of thirty minutes. He said, 'There was no time for rest or refreshment in the afternoon; we had to eat our meals as we could standing or otherwise. I had 14½ hours actual labour when 7 years of age, the wages I then received was two shillings and 9d. per week. . . . There were three overlookers . . . there was one kept on purpose to strap. Strapping was the means by which the children were kept at work. It was the main business of one of the overlookers to strap the children up to this excessive labour. . . . This was the practice day by day. The overlooker is continually walking up and down with the strap in his hand, and his office is to strap the children to their labour. The children could not be kept so long to their labour, if they were not so treated. . . . The children were not capable of performing the amount of labour that was exacted from them without perpetual cruelty. . . . Out of the thirty minutes allowed for dinner, five minutes and sometimes ten were occupied in cleaning the spindles. Sometimes during the time I worked a Bradley mill the clock was a quarter of an hour too soon in the mealtime; we had just done fettling, and we had but got half our dinners, and the overlooker put the clock forward to one, and he rang the bell, and we were obliged to run back to our work. . . . There is considerable dust in that employment. You cannot take food out of your basket or handkerchief but what it is covered with dust directly. This circumstance renders the more necessary that we, the children, should have time to eat our breakfast and "drinking" which are brought to us, but they will not allow us the time, and we have to bolt our food as we can; it is laid upon the board—sometimes the "flue" gets into it so that we cannot eat it. The children are frequently sick because of the dust and dirt they eat with their meal. If they were allowed a little time to get their breakfast and "drinking" in, they could then go out of doors and get the meat clean and comfortable, and the dust would not get into it. The children ate their dinner on the boiler house thatch or anywhere, as they could not go home. I lived a good mile off. In winter we children ate our dinner sometimes out of doors, and some times in the mill.'

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Later the witness describes a mill where 'the usual time of labour for the children was twelve hours per day, 6 a.m. to 8 p.m., with half an hour for breakfast, an hour at noon and half an hour at "drinking" time. But at ten years old he could not stand these hours.'

Elizabeth Bentley said in her evidence that she started at six. The time allowed for meals was forty minutes at noon: there was no time for breakfast or 'drinking' which they got as they could. 'When our work was bad we hardly had any time to eat them at all; we were obliged to leave them or take them home. When we did not take our uneaten food home the overlooker took it and gave it to his pigs. . . .' Later she says, 'I had not much food to eat and the little I had I could not eat, my appetite was so poor. My food being covered with dust it was no use to take it home'.

Samuel Coulson, a parent of factory children, described little girls going to the mills at 3 a.m. and remaining there until 10 or 10.30 p.m. Asked what intervals were allowed for rest or refreshment during these nineteen hours of labour, he replied, 'Breakfast a quarter of an hour, and dinner half an hour, and "drinking" a quarter of an hour.'

'Was any of that time taken up in cleaning the machinery?'

'They generally had to do what they call "dry down": sometimes this took the whole of the time at breakfast or drinking, and they were to get their dinner or breakfast as they could.'

'Had you not great difficulty in awakening your children to this excessive labour?'

'Yes, in the early time we used to take them up asleep and shake them when we got them on the floor to dress them, before we could get them off to work. . . .'

'What was the length of time they could be in bed during those long hours?'

'It was near 11 o'clock before we could get them into bed after getting a little victuals, and then at morning my mistress used to stop up all night, for fear we could not get them ready for the time. . . . In general me or my mistress got up at 2 o'clock to dress them.'

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'So they had not above four hours sleep at this time?'

'No, they had not.'

'Were not the children excessively fatigued by this labour?'

'Many times; we have cried often when we have given them the little victualling we had to give them. We had to shake them and they have fallen to sleep with the victuals in their mouths many a time.'

Light is thrown on the 'tommy-shop', or truck system, by one of Coulson's answers. Asked if they could dispose of their wages as they pleased, he replied, 'The children have said "if we do not bring home a little from the shop I am afraid we shall lose our work".'

The wages paid to the children for these hours were 3s. 7½d. a week. Beating was a regular part of the routine, and one boy is described as being kicked so hard in the back that he was hideously deformed for life. A large number of the children became deformed through overwork and the appalling conditions and treatment. One boy of seventeen ends his evidence with the pathetic cry, 'Oh, I would give a thousand pounds to have the use of my limbs again'.

In March 1825 an anonymous observer published *A Sketch of the Hours of Labour, Mealtimes, etc. etc., in Manchester and its Neighbourhood*, which shows that even legislation could not prevent abuses. The conclusions drawn by this observer as regards Manchester, are that: 'The hours of labour at present seem, on the average, about fourteen. The greater number of mills allow half an hour for breakfast; and some fifty minutes, some an hour for dinner. There are others, however, which allow no time for breakfast. In this place also the men seem for the most part to be dismissed on Saturdays about 4 o'clock p.m. Common hours here are from 6 a.m. until 8 p.m. Or from 5½ a.m. to 7½ or 8 p.m. (and a few 8½ p.m.).

'N.B. But although the meal times are nominally allowed (and the grown-up spinners released) the children, or piecers, are detained three or four days in each week during those meal times, to clean the machinery; consequently they get no exercise nor change of air, and what is worse, are driven to the necessity of snatching by mouthfuls their food during the act of

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cleaning whilst dust and cotton flue are flying and falling thick around them.

‘This remark applies generally throughout all these districts.’ Other places visited by this observer include Stockport, Ashton-under-Lyme, Burnley, Oldham, Leeds, Ballinton, Chorley, Preston, Colne, Glossop, Hatfield. At most of these the hours were from fourteen to fifteen and the breakfast half-hour was allowed at a very few mills. The dinner hour of forty to sixty minutes was usual. Hours of dismissal on Saturdays varied from 4 to 6 p.m.’ The writer’s final comment is: ‘The practice of detaining the children to clean machinery during the time nominally allowed for breakfast and dinner is general; to say how extremely injurious it is to their health cannot be necessary. The mere continuity of labour for so many hours together (granting that labour be ever so moderate) must, to a child, be dreadfully exhausting; add to this that it snatches its meal in a hurried manner in the midst of work, and in a place of dust—in a foul atmosphere and in a temperature equal to a hothouse. This, at present, is perhaps by far the most prominent and mischievous violation of the Act, and it is general.’ The Act referred to is the Factory Act of 1819 which remained largely inoperative owing to the lack of provision of inspectors for seeing that it was enforced. It forbade the admission of children to cotton mills before the age of nine and reduced the hours of work for those under sixteen to twelve, though it allowed hours wasted by stoppage of machinery to be made up. Peel’s Act of 1802, dealing with pauper apprentices in the cotton and woollen industries, had proved equally ineffective for the same reasons.

Conditions were equally horrible in the mines. Children from four years onwards were condemned to sit day after day in inky darkness from dawn till dusk opening and shutting trap-doors. As they became older they hauled trucks with ropes between their legs. The men worked naked and the women and girls naked to the waist. Girls and women were nothing but beasts of burden. Their hours were long and ill-paid. Many of them never saw daylight for months on end, or if they did were too exhausted to appreciate it.

In the report on children’s employment of 1842 we find the

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words: 'Of all the coal districts in Great Britain there are only two in which any regular time is usually set apart for the rest and refreshment of the workpeople during the day, and in which it is the general custom to observe the time so fixed strictly and uniformly.'¹ These districts were South Staffs and Forest of Dean, the former being the only coal area in England to provide places for accommodation of workpeople during meal hours. As a general rule miners were allowed no free time for meals whatsoever, but were compelled to take refreshment in snatches without breaking off work.² 'In the great majority of the coal districts of England, Scotland and Wales, no regular time whatever is even nominally allowed for meals, but the people have to take what little food they eat during their long hours of labour when they best can snatch a moment to swallow it',³ were the words of the Commission's report in 1842.

The story of the heroic struggle of Richard Oastler and the Earl of Shaftesbury to get these abuses stopped by Parliament are too long to describe in a work of our present scope. Great opposition was put up however to their labours by respectable people who boasted the highest moral principles and included learned economists and lawyers. Eventually, however, public opinion was so outraged by the disclosures of the various inquiries which were set on foot that legislation was brought in to limit the hours of women and children, and finally to abolish the labour of children altogether.

A HUMANE EMPLOYER

In the meantime a few enlightened employers had been trying to prove that one could be successful as well as being humane in business. Sir Richard Arkwright, who, though not above sharp practice in some of his business dealings, was human as regards his workpeople, refused to employ children in his factories. Samuel Oldknow, who was closely associated with Arkwright in business, was ahead of his time as regards 'welfare' and care of his operatives. The outstanding figure, however, of this

¹ First report on Children's Employment Commission (Mines).

² Bready, *Lord Shaftesbury and Social Industrial Progress*.

³ First report on Children's Employment Commission (Mines).

A Humane Employer

period, who has now become the patron saint of welfare activities and personnel management, was Robert Owen, whose achievements will be dealt with later.

Writing of Samuel Oldknow in his book, *Samuel Oldknow and the Arkwrights*, Professor Unwin says: 'The implication that Oldknow was generally recognized as an exceptionally humane employer is strongly supported by the testimony of Robert Blincoe in a memoir whose main purpose was to expose the evils of the factory system.¹ Blincoe, who spent some time in the Mellor Mill during Oldknow's lifetime, states that the apprentices whom he saw at work seemed cheerful and contented and looked healthy and well, that they were fed with milk porridge and wheaten bread for breakfast and that their meals were good and sufficient. The hours worked were from six in the morning till seven in the evening, but this was the shortest working day usual at the time in factories. The worst factories worked from five till eight.

'It is possible to learn a good deal about the life these children led during their apprenticeship from the descendants of apprentices who settled at Marple and Mellor.

'One old lady of eighty, the daughter of an apprentice gave . . . a graphic account of her mother's journey from the Duke of York's orphanage at Chelsea in a stage coach, and her life in the "prentice house". According to her account the children worked long hours, but every day went through exercises in the meadows in front of their house, which kept them in good health. . . . Their food was the best that could be procured. They had porridge and bacon for breakfast, meat every day for dinner, puddings or pies on alternate days, and when pigs were killed were regaled with meat pies which were full of meat and had a short crust. All the fruit in the orchard was eaten by the children. . . .'²

Speaking of Oldknow's efforts to provide staple foodstuffs for his operators, Unwin writes: 'Like other captains of industry who built factories in rural districts, Samuel Oldknow had been obliged to organize supplies of the chief necessities of life for many of his workers. Since the beginning of 1791 he had been

¹ See *supra*, p. 135.

² Unwin, *Samuel Oldknow and the Arkwrights*, p. 173.

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providing houses, milk, coals, meat and beds for an increasing number of transient or permanent employees and deducting the cost from their wages. There is no reason to stigmatize this as "truck". Most, if not all, of the necessities supplied were produced on Oldknow's own estate and were probably sold more cheaply than they could otherwise have been obtained. Even when he advanced £50 in August 1791, for the purpose of stocking a general shop, it is likely that it was for the convenience of the new population and not his own profit that he had chiefly in mind. Enlightened self-interest mingled with higher motives led employers like Robert Owen and the Greys of Styal to organize supplies without exploiting their workers, and the systems they created passed into the hands of the co-operative societies.¹

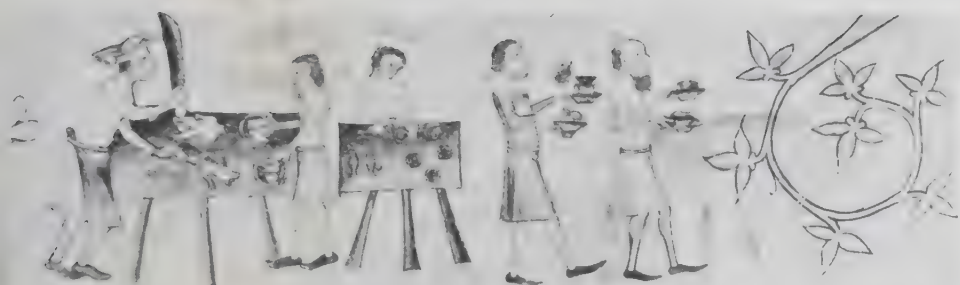
Further on Unwin describes how 'Oldknow provided facilities for a number of his workpeople and tenants to keep cattle. He also kept a herd of milking cows to supply the needs of his factory workers and deducted the amount of their purchases from their wages. . . . For the purpose of supplying the factory hands and tenants with meat, bullocks were reared . . .'² also 'A rich sheltered portion of land three acres in extent . . . provided an ideal situation for a garden and here Oldknow built his garden house and employed a professional gardener who cultivated, gathered and delivered all the usual vegetables and garden fruits in season to the workpeople and the tenants, and rendered an account once a fortnight to the factory manager, who deducted the amounts from the wages of the various purchasers. The total receipts from garden produce for the years 1804, 1809 and 1810 were respectively £262, £285 and £329.' Generally speaking the local inhabitants and workpeople consumed from one-half to two-thirds, and the apprentices roughly one-sixth of the total production.

PROVISIONS BY THE LONDON LEAD COMPANY

The London Lead Mining Company provides another progressive example. Its mines were generally in comparatively isolated places which made the provision of food at times an

¹ *Ibid.*, p. 205.

² *Ibid.*, p. 205.



1. Cooking and dressing meat in the 14th century

From the Luttrell Psalter



2. A family dinner in the early 15th century



3. Eat away Ned ! it's only eighteen pence much or little

Provisions by the London Lead Company

acute problem. As in the case of Hasland Colliery in Derbyshire, special steps had to be taken to ensure a good supply at reasonable prices, similar to those taken by Samuel Oldknow.

The London Lead Company was a Quaker concern which flourished between the years 1692 and 1905. In addition to mining lead, this company also mined silver and supplied a good deal of silver for the Mint. Its mines were widely scattered and some were situated in almost inaccessible places. In times of scarcity and high prices the problem of food for the workers became acute and the company found itself obliged to take practical steps to alleviate hardship. The story is admirably told by Mr. Arthur Raistrick in his book, *Two Centuries of Industrial Welfare*, published in 1938.

‘Throughout the history of the company the question of price and adequacy of the food supplies available for their miners had been brought to the consideration of the Court (of directors) by sheer force of circumstances’, writes Raistrick. ‘The remoteness of many of the mining fields from large markets had subjected the miners to scarcity both real and artificially stimulated for profit, and on many occasions through the first century of their work the Court authorized the sending from London to Chester, or Wanlock Head, or Alston, of a cargo of food, mainly grain, corn and rice, that was to be sold to the men at London prices.’ In 1728 a minute of the Court of Directors states that ‘whereas our Chief Agent in Flintshire, Thos. Barker, hath in severall of his letters represented to us the scarcity of corn and the Hardships of the poor Miners Smelters and others were under by the advanced price thereof and that if they were not Speedily supplied he should be obliged to raise their wages to allay their great complaints and keep them Quiet, being at the same time sensible how difficult it will be to reduce their advanced wages hereafter, to prevent which Inconveniency we think it for the Interest of the Company and will redound much to their Reputation to send them a Supply of Corn from hence, being much Cheaper than their Markets.

‘Therefore we desire the Treasurer that he will give orders for the hiring of a vessel abt 60 Tunns and for the buying about

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400 Quarters of Corn vizt: 280 qurs of Barley, 80 qurs of Wheat and 80 qurs of Oates for the relief of the Miners Smelters and others who are Employed in our severall Works there.'

'This action', says Raistrick, 'was, however, only taken occasionally on specific complaints from the agents, and demanded no settled policy of the company.'

'Towards the end of the eighteenth century', continues Raistrick, 'the general trend of prices throughout the country was marked by a sharp upward movement, with resulting increasing poverty of the labouring classes everywhere. A crisis was reached about 1795, when an acute shortage of food was experienced in all parts of the country. In that year the Court of the Company was informed by its agents of widespread distress among the miners of the North because of the dearness of bread and their remoteness from markets, and the Court began a series of contributions of £50 to be used for the relief of poor miners. Occasional cargoes of grain were sent to Newcastle, and the agents were authorized to buy further stores of grain in Newcastle and Alston markets, to be resold to their employees, at cost price. By 1800, however, the position had become very serious, and the Company had to reconsider its responsibilities and decide on some definite line of action to meet the increasing distress and consequent illness and discontent among the population of Alston Moor and Teesdale. An inquiry proved the main source of distress to be the dearness of bread, resulting partly from the scarcity of corn, but very largely aggravated by the exorbitant charges of the corn millers and flour dealers. Time after time the workmen complained of this, until the Company felt that they must find some real solution other than occasional charity. They finally decided in 1800 to buy the old lead mill at Tynebottom, near Garrigill, and to refit it as a corn mill to supply the whole district. The mill was worked under their supervision, and quite quickly reports were received by the Court, that the whole district was benefiting by better ground corn and by just prices. The second source of complaint was that corn had to be brought by the dealers from Newcastle market, which none of the miners were able to visit (a distance of about forty miles) and that the prices were increased almost

Provisions by the London Lead Company

to monopoly levels. The Court ordered the agent at Nent Head to purchase £500 worth of grain, to store it somewhere in the offices and to sell it to the miners and their families at cost price only. Eight casks of rice were sent from London to supplement this. Along with the operation of the Company's corn mill at Tynebottom, this relieved the situation for the time being, but soon other problems arose. It was difficult to provide this relief for the Company's workmen and see the general population of the district still in the grip of prohibitive prices, so the scheme was soon enlarged and thrown open to all the residents in the district, whether employed in the mines or not.'

About this time the firm changed its wage policy to conform more nearly to the cost of living. Hitherto wages had been based on the cost of the product of the mines, i.e. lead, it was now decided to base them on the cost of food. 'Towards 1815 and 1816', however, we are told, 'conditions again worsened, and this scheme of occasional purchases of grain began to fail. Mr. Stagg, the new agent, advocated that the Company should take over entirely the supply of grain to the men, and again after some consideration, a scheme for this purpose was evolved. The Company authorized Stagg to purchase all the grain required, in Newcastle or Alston, and allowed him to issue to each miner a month's supply for his family and dependants, the cost being debited from his wage. . . . In November 1816, the Court instructed Stagg that the corn was to be issued to the men "at a certain price, according to the Rate of Wages paid them", wheat was to be sold as near as possible to cost price, but rye could be sold at a loss or about 5s. per boll. In 1817 the agent reported the great advantage of this plan, and that the loss on the first year of its working was only about £100. 1000 quarters of rye were bought the next year, and it is recorded that "we wish this to be supplied at the market price, though it may entail loss. . . ." The Company's loss was largely on cost of carriage and agents' charges, etc.'

Raistrick quotes entries from the agent's journal made between 1816-20 which refer to these transactions. Under 5 March 1817 we find . . . 'Got a supply of Oat Meal into the (New Office) for the Workmen at which they seem very glad'. Under March 7

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the same year we read 'A supply of Oat Meal has this day been delivered to the Workmen, which is a most seasonable relief. And after all that can be done, on Acct. of the dearness of the times, they are many of them almost in a state of starvation.' On March 15 the agent writes, 'Spent the day at Alston purchasing Oat Meal, etc. for the Workmen.' March 21, 'This has been a very busy day delivering Oat Meal to the workmen. At the close of this day's delivery (this being the last for the present month) it appears the consumption is 72 Alston Bushels or 108 Bolls.' Under April 3 it reads, 'Delivering Oat Meal and almost smothered with the crowd—at the end of each month, a considerable part of the population is on the brink of starvation.'

'Until 1820', writes Raistrick, 'this method of delivering corn continued, but at the end of that year the Company gave each workmen an advance of one month's wages, with a request this money be used to initiate the scheme among the workmen themselves, the Company being guarantors of their solvency. This arrangement worked successfully until the recurrence of famine conditions in the "Hungry Forties". In 1841 the position had again become acute and . . . the Court urged the miners to form their own Corn Association and promised to give it aid "as circumstances arise". This was done and the Association soon reported considerable success. A similar Corn Association was formed at Middleton-on-Tees with equally good results'.

As Raistrick points out these Corn Associations were really pioneer Co-operative Societies. They were very active up to about 1860. The mill at Tynebottom was taken over and a granary built in 1845. According to the agent's report the general effect of the Association which continued to receive grants from the Company, was 'to create a closer bond between the man and the Company, and also to give the men a sense of responsibility in running their own concern'.

Another admirable facility provided by this Company for the workmen was what was called the 'Ready Money Shop' which had been established at an early date at Nent Head and later in Middleton. It was built by the Company and leased to a

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shopkeeper on an undertaking that he should only sell goods for cash. The Company assisted the shop by buying stores on a large scale in Newcastle, allowing it the use of its transport and supplying it with a warehouse. By means of this shop the workmen were able to get out of the clutches of the numerous and extortionate 'credit shops' with whom they were often deeply in debt.

EARNINGS AND FOOD

Pausing for a moment to take a look at wages in general at this time we find collective earnings of an agricultural labourer in Bedfordshire were 11s. 9d. a week at the beginning of the century—which is about the average for the country. By the end of the year this family would have exceeded its bare minimum expenditure by £3 15s. 9d. In Yorkshire the average weekly earnings of a family were only 7s. while their annual deficit was £12 13s. 0d. In Hertfordshire though the family earnings were 12s. 6½d. the annual deficit was £22 3s. 6½d. The living, it will be seen, varied considerably with locality. A Cumberland labourer with a wife and family of five spent £7 9s. 2d. a year on oatmeal and barley, whereas a Berkshire labourer spent £36 8s. yearly on wheaten bread alone.

In the South oats were looked upon as pig food. Nourishing soups provided by well-intentioned philanthropists were rejected by the labouring classes as 'washy stuff'. 'They buy the finest wheaten bread and declare that brown bread disorders their bowels', wrote Sir Frederic Ede. Lord Sheffield grew indignant when he found that parish relief given partly in potatoes and oaten and barley flour was despised and said the parish officers would be justified in 'refusing other succour' if it were rejected.

An important defence of the labourers' conservatism lay in the fact that whereas on the Continent, as formerly in England, meat, fish and other foods were cheap and plentiful, and bread formed, therefore, only a small part of the labourer's diet, the prices of these commodities had now so risen in England as to make bread the main part of his food. Thus it was essential that it should be nourishing and pure. This point was put forward

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by Charles James Fox very forcibly in Parliament, when he said: 'The quality of bread that is eaten by those who have meat, and perhaps porter and port, is of very little consequence indeed: but for the hardworking man, who nearly lives on it, the case is abundantly different'.

The reason why the northern labourer was content with cereals unpalatable to the southerner is given, by Thorold Rogers, as being due to the fact that the consumption of milk of the northerner was 1,300 quarts yearly as compared with the southerner's yearly 104. The lack of milk for the southerner was not a matter of choice but of necessity. Milk in the south was not available and the labourer no longer kept a cow. The produce found its way, not only into his kitchen and belly, but into what sturdy Cobbett called the haunts of 'idlers, thieves and prostitutes . . . tax eaters in the wens of Bath and London'.

According to the Hammonds, the habit of tea drinking among the poor arose from this scarcity of milk, and evidence from a number of sources suggest that this is so.¹

At the end of the eighteenth century, according to Eden, tea was in general use among poor families taking the place of milk and beer.

Some interesting attempts were made to supply milk to the labouring classes at reasonable prices. A Staffordshire tradesman undertook to keep a number of cows for the community and at Stockton, County Durham, the Bishop of Durham made it a condition of his lease of a certain farm that the tenants should keep fifteen cows whose milk was to be sold at $\frac{1}{2}$ d. a pint to the poor. Lord Winchilsea got over the difficulty by supplying his cottagers with 174 cows possessed between them. About a third of their land they held in common: others had use of common cow-pasture. Most of them had a small home farm adjoining their cottage, a good garden and kept a pig. Similar allotment schemes were established, generally with excellent results.²

It was in 1795 that the disastrous decision was made by the Justices of the Peace assembled together at the Pelican Inn.

¹ See J. L. and B. Hammond, *The Village Labourer*, 1760-1832.

² Ibid.

Earnings and Food

Speenhamland, Berkshire, that where wages paid to agricultural workers did not come up to the required figure for a reasonable standard of living, they should be supplemented from poor relief. This decision, known thereafter as the Speenhamland decision, became a model for other Justices and a direct incentive to employers to underpay their workpeople at the expense of the community. It is not surprising that the poor relief figure for 1795 went up to £4,000,000, though it is true, as we have seen, that it was in many ways an exceptional year.

The incomprehensible thing to most people who consider the second half of the eighteenth century in England must be the complete paradox it presented. Between 1761 and 1801 it is reckoned three millions of acres were enclosed. This was done largely as the result of the preaching of Arthur Young, the evangelist of more efficient farming, who was eventually appointed by Pitt to be secretary of his newly appointed Board of Agriculture. Never before had agriculture been so efficient or so thriving as it was in the last half of this century, yet never before, except in periods of pestilence or famine, had the farm labourer been so near starvation.

For comparison, interesting light is thrown on industrial conditions at this time by a pamphlet published by the Northumberland miners in 1825, with the title *A Voice from the Coal Mines*. The writer takes a man with wife and three children and puts his gross earnings at £2 a fortnight. This, he says, is a high figure. Deductions for fines, rent, and candles will bring it down to thirty shillings, or fifteen shillings a week. How far will this go?

	s.	d.
Bread, 2½ stone at 2s. 6d. per stone	6	3
1 lb. of butcher's meat a day, 7d. per lb.	4	1
2 pecks of potatoes at 1s. a peck	2	0
Oatmeal and milk for 7 breakfasts at 4½d. each morning	2	8
	<hr/>	
	15	0
	<hr/>	

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For comfort the family also need:

	£	s.	d.
2 oz. of tea at 6d. per oz.		1	0
2 lb. of sugar at 8d. per lb.		1	4
1 lb. of salt butter		1	2
1 lb. of cheese			9
Pepper, salt, mustard, vinegar			4
Soap, starch, blue, etc.		1	6
Tobacco, 1½ oz.			5½
1 pint of ale a day		1	9
Clothing for 5 persons		3	0
Weekly expenses (shown above)	15	0	
	<hr/>		
	1	6	3½ ¹
	<hr/>		

Many colliers, the writer claimed, would die if they did not take their children to work fourteen hours a day as soon as they could speak and walk.

In 1833 the factory commissioners found some miners got 15s. and some 14s. per week. Often they only received 10s. owing to reductions for candles and tools.

¹ See *The Town Labourer* (1918). J. L. & B. Hammond, pp. 34-35.

Chapter VI

ROBERT OWEN AND THE NINETEENTH CENTURY

OWEN AND NEW LANARK

The greatest of the enlightened employers of the Industrial Revolutionary Era was undoubtedly Robert Owen, who has left a most revealing picture of himself in his own autobiography.

Born 14 May 1771, Newtown, Montgomeryshire, he was the youngest of seven children and came to London at the age of ten. After working at Stamford for three years he returned to London where he worked for a John Sattersfield 'whom', as he says, 'I left while yet a boy, to commence business of limited scale, in making machinery and spinning cotton'. Afterwards he undertook to manage the spinning establishment of Mr. Drinkwater at Manchester and Northwich, Cheshire for three or four years. Later he went into partnership with Messrs. Moulson and Scarter, cotton-spinners, Manchester. His best work was done, however, when he went into partnership with the Messrs. Barton, Atkinson and others to form the Chorlton Twist Co., which about 1799 took over the management of his father-in-law David Dale's spinning works near the falls of Clyde. Thirteen years later Owen gave an account of his stewardship in which he stated that at the commencement of his management he 'arranged the outline of a plan', on a principle on which he had acted previously in a different part of the kingdom for several years; 'which was intended to unite and

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bring into action all the local advantages of the situation; to produce the greatest ultimate profits to the proprietors, with the greatest comfort and improvement to the numerous population to whom it afforded employment; that the latter might be a model and example to the manufacturing community, which, without some essential change in the formation of their characters, threatened, and now still more threatens to revolutionize and ruin the empire'.

'The plan', continues Owen, with sublime self-confidence which events have amply justified, 'was founded on the simple and evident principle, that any characters, from the savage to the sage or intelligent benevolent man, might be formed by applying the proper means and that these means are to a great extent at the command and under the control of those who have influence in society'. 'This system', he says, 'has been pursued at these works, without a single exception from the principles stated for thirteen years, and the result has been precisely what was calculated. The population originally brought to the establishment was, with a few exceptions, a collection of the most ignorant and destitute from all parts of Scotland, possessing the usual characteristics of poverty and ignorance. They were generally indolent, and much addicted to theft, drunkenness and falsehood, with all their concomitant vices, and strongly experiencing the misery which these ever produce. But by means so gradually introduced, as to be almost imperceptible to them they have been surrounded with those circumstances which were calculated, first to check and then remove their inducements to retain these inclinations, and they are now become conspicuously honest, industrious, sober and orderly; so that an idle individual, one in liquor, or a thief, is scarcely to be seen from the beginning to the end of the year; and they are become almost a new people, quite ready to receive any fixed character which may be deemed the most advantageous for them to possess'.

Although Owen possessed a greater number of shares in the business than any other individual he found himself faced with a board of directors who preferred a more immediate and profitable return on their capital and were not particularly interested

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in schemes for the betterment of the character of the working classes, though, in fact, they had received a steady 5 per cent interest on their money throughout Owen's management. He therefore appealed for public-spirited men to buy out his directors and give him a free hand to carry on his ultimate design. In justification of his method from a commercial point of view alone, Owen pointed out that during his management, in addition to paying over 5 per cent interest on the £50,000 capital invested in it, the company had been in a strong enough position to support over two thousand individuals for four months while out of employment at a cost of more than £7,000. 'In the same period', continues Owen, 'improvements have been carried on and finished out of the profits, which have now increased the powers of produce at the establishment to five times their original extent, and at an annual reduction of prime cost of nearly six thousand pounds, with a great improvement in the quality of the material produced; and a considerable progress has also been made towards completing six times the extent, at an annual reduction of prime cost exceeding eighty thousand pounds, which will be the state of the establishment at the end of the next year. In the same period also, an addition has been made to the village, forming part of the establishment, to contain from eleven to twelve hundred more inhabitants, which have been added to its population; and these with the former occupiers of the houses, have been provided with all manner of public conveniences and external comforts; and the most ample means were in preparation and far advanced to give their children the most beneficial education for their station in the community, and effectually to train them to habits which could not fail to make them valuable members of society.' After stressing the rosy commercial future for the business due to the ever increasing demands for its products, Owen continues: 'But those who feel a deep interest in the well-being of their fellow-creatures, it will be considered of far more importance that the slothful are become diligent, the thief honest, the drunkard sober, the licentious temperate, the wretched and diseased, healthy and comparatively happy; that poor's rates and litigation are banished from the community; and that the rising

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generation are now acquiring those habits and that knowledge which gives the most heartfelt gratification to all who visit them. In consequence the village and works, which have been created at an expense probably of two hundred thousand pounds, have now more the appearance of a national benevolent institution than of manufacturing works founded by an individual; and, in fact, it has become a national establishment of high interest to the community; for it may now be justly said to be the best model in practice of a charitable institution, which, in lieu of debasing the character of the poor, and impoverishing the rich, directs and enables the former to support themselves in comfort and independence, and by their industry and good conduct to add essentially to the national wealth and resources.'

Owen then goes on to describe the new developments he wishes to introduce, the object of which is, he announces, 'to increase the population, diminish its expenses, add to its domestic comforts and greatly improve its character'. 'Toward effecting these purposes', he continues, 'a building has been erected which may be termed the "New Institution" situated in the centre of the establishment with an enclosed area before it. The objects intended to be accomplished by which are, first, to obtain for the children from the age of two to five, a playground in which they may be easily superintended, and their young minds properly directed, while the time of the parents will be much more usefully occupied, both for themselves and the establishment. . . . The area is also to provide a place of meeting for the children from the age of five to ten, previous to and after school hours, and to serve the boys for a drill ground. It likewise contains conveniences calculated to give the children such habits as will enable the master of police to keep the village in a decent clean state; and this is no small difficulty to overcome, where other habits have always obtained.

'Secondly to procure a large store-cellar, which was much wanted and by this arrangement has been placed in the most advantageous situation for both the works and the village; and it will be found to be of much use to the establishment.

'Thirdly, a kitchen upon a large scale, in which food may be

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prepared of a better quality, and at a much lower scale, than individual families can now obtain it; for under this arrangement two or three fires and half a dozen attendants will supersede the necessity of several hundred fires, and as many attendants, particularly in summer; and the provisions will be prepared of the most wholesome and nutritious materials, obtained at the cheapest rates, aided by every known convenience, and the best information which can be collected on the subject. It is obvious that most of the families among the working classes are unusually destitute of all these advantages.

‘Fourthly, an eating-room immediately adjoining the kitchen one hundred and ten feet by forty, within, in which those to whom it may be convenient, may take all their regular meals. As several of the young persons employed at the works reside at the county town of Lanark, more than a mile distant, and from which their meals are regularly sent at considerable trouble and expense; and as a still greater number *lodge* in the village, and now inconveniently board themselves, these will all find immediate benefit from both the kitchen and the eating-room, and they afford so many substantial advantages to the general inhabitants of the place, that it is to be feared the space allotted for the eating-room ample as it may appear will soon be found too circumscribed.

‘Fifthly, the eating-room, by an immediate removal of the tables to the ceiling, will afford space in which the younger part of the adults of the establishment may dance three nights in a week during winter, one hour each night; and which under proper regulations, is expected to contribute essentially to their health. . .’

Owen then describes facilities for education including a course in cooking and catering for the girls; ‘they were to attend in rotation in the kitchen and eating-room’, he says, ‘to learn to cook cheap nutritious food, and to clean and keep a house neat and in order’.

‘The whole expense of these combined operations’, says Owen later, ‘will not exceed six thousand pounds (this includes various road improvements as well as educational buildings), three thousand of which have been already expended; and so

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far as my former experience enables me to judge of the consequences to arise from them, they cannot save less to the establishment than as many thousand pounds per annum, but probably much more. . . .’ Among reasons for this sanguine forecast he states that ‘the kitchen and eating-room will enable the proprietors to support the population of the village, not exceeding 2,200 individuals, at 1s. 6d. per week less than the expense at which they now feed themselves; which alone will constitute a saving of £8,580, to be divided between the proprietors and the population of both towns’.

Owen concludes his statement on an ominous note by affirming ‘advantageous, however, as these arrangements will be to the individuals employed at the works and to the proprietors of the establishment, they will yet prove of far higher importance in a national view by the principles they will establish, and the consequences which will arise from them. For now the manufacturing population of this country is feeling alive to its apparent interests, extremely active, and that activity increased to the highest pitch by the present state of commerce, requiring all their exertions for their support; but they are also with partial exceptions, so ignorant as to be easily misdirected, and their numbers exceed the half of the population of the kingdom. Can such a combination of circumstances be contemplated without a conviction that, if they shall be permitted to continue much longer without an effectual remedy being applied, very fatal consequences must result?’

VISITORS TO NEW LANARK

In 1819 a medical man, Dr. Henry Grey MacNab, was so greatly impressed with Robert Owen’s achievements at New Lanark, that he published a monograph entitled, *The New Views of Mr. Owen of Lanark Impartially Examined*, and dedicated it to His Royal Highness the Duke of Kent, the father of the future Queen Victoria, who had long been a friend and patron of Robert Owen. This book was largely a description of a visit paid by Dr. MacNab to Owen’s factory at New Lanark and contains some further information on Owen’s methods of industrial catering and industrial welfare as a whole.

Visitors to New Lanark

After describing the schools and lecture rooms, Dr. MacNab goes on to write of 'the building lately erected for a public kitchen: it is of considerable dimensions, being 150 feet in length by 45 feet broad, and three stories in height. The ground floor comprises two spacious kitchens, a bakehouse, storerooms and superintendents' departments. The upper stories are divided each into two equal apartments, those on the first being designed for eating-rooms and the two above for lecture and reading rooms, etc. . . . The obvious effect of such an establishment, besides many accompanying advantages, is to diminish the expense, while it multiplies the comforts of living to the inhabitants in general, by the economy of fuel and attendance, and by the cheaper and more nutritious preparation of food which may be thus attained'.

Dr. MacNab goes on to describe a feature not mentioned by Owen in his plan, but one which must greatly have added to the quality of the catering. 'There has long been granted to each householder at New Lanark', says MacNab, 'a portion of garden ground to cultivate; but in order to increase the supply of vegetable food, a new public garden has been laid out by the company which is to extend to seven or eight acres. It is surrounded by a belt of planting, and a spacious walk for the recreation of the work people.' MacNab also describes a village and factory shop similar to those established by Samuel Oldknow and 'The Quaker Company' where 'the inhabitants are supplied with provisions, clothing and every necessary of a good quality, and at a reasonable rate'.

Speaking of Dale's original factory (before his son-in-law Robert Owen took it over), MacNab says of 'The boarding-house containing the children' (i.e. 'five hundred children who were procured chiefly from workhouses and charities in Edinburgh') 'the benevolent proprietor spared no expense to give comfort to the poor children. The rooms provided for them were spacious, always clean, and well ventilated; the food was abundant and of the best quality. . . .' Nevertheless, under Owen, 'the system of receiving apprentices from public charities was abolished'.

A 'detailed account, given on the spot by one of the deputies,

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sent by the township of Leeds to examine Mr. Owen's establishment, and the principles of which his plan for ameliorating the condition of the poor is founded', is also quoted by Dr. MacNab. This account states: 'In one of our walks we met a woman with a choice piece of beef purchased at the establishment. She told us that she had only paid 7d. per lb. and that she could not have bought it under 10d. in Glasgow market'. We find a reference to this shop in the *Life of Robert Owen by Himself*, from which we see that it was run on similar lines to those of Oldknow and the London Lead Co. 'I also organized arrangements to supply all the wants of the population buying everything for money on a large scale in the first markets, and supplying them at first cost and charges. They had previously been necessitated to buy inferior articles, highly adulterated, at enormous prices, making their purchases at small grocery and grog shops, chiefly on credit; and their butcher's meat was generally little better than skin and bone. By the time the arrangements to provide for the whole circle of their wants in food, clothing, etc. were completed, some of the larger families were earning two pounds per week, and the heads of these families told me that my new arrangements to supply their wants saved them in price ten shillings weekly, besides the great difference between deteriorated and the most inferior qualities, and the best unadulterated articles. The grocery and grog shops soon disappeared, and the population soon relieved themselves from the debts previously contracted to them.'

THE INFLUENCE OF ROBERT OWEN

From these descriptions it will be seen that Robert Owen was not only the pioneer of modern Industrial Welfare but the father of modern Industrial Catering. It is true there had been employers in the past who had been feeling after a more humane ideal in industry, such as Ambrose Crowley, the ironmaster, and even, if we can trust Deloney, Jack Winchcombe, the clothier of Newbury. It was left to Owen, however, to work out a practical system of Industrial Welfare, based on a common-sense philosophy, and proved by results to be sound, not only from the ethical, but also from the business point of view. It is



4. Dinner at a cheap lodging-house, mid-nineteenth century



5. Lloyds Coffee House, Lombard Street, 1863



6. Robert Owen
(1771-1858)

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not surprising that Owen, like another mill-owner, Sir Robert Peel, was among the most active spirits in bringing in Factory Laws to regulate and abolish the abominable abuses of children's and women's labour in factories. The enlightened employer, of whom Fielden was another who worked hard for reform, was bound to realize that the callous and brutal master was forcing the decent owner either to follow his vile example or go out of business. Thus it was in the best interests of the humane employer to work to regulate the abuses. This was not realized at first, but eventually a great number of factory owners abandoned their opposition to the Factory Act movement and became its most ardent supporters, much to the gratification of such disinterested and wholly devoted workers as Lord Shaftesbury, whose practical contribution to the material welfare of his fellow men, women and children, probably out-rials that of any reformer in history.

Later on, as we shall see, others followed the example of Robert Owen, and 'Model Factories' began to spring up all over England. This was wholly to the good, even though the motives may not always have been entirely humanitarian and progressive as were Owen's. Owen was a positive and constructive pioneer who pointed the way to a saner and more productive future and laid the foundations of a movement which has still a great deal of progress to make in the life of industry. To such reformers also as the great Shaftesbury, the Owens and Oldknows were necessary, as being able to refute the barren argument that abuses were essential in order for manufacturers to carry on. These men showed that not only were abuses not necessary but that industry thrived better without them.

Economic thought, as we have seen, followed generally the *laissez-faire* school of reasoning which held that economic forces, if left to themselves, without Government or other interference, would eventually produce, in Bentham's phrase, 'the greatest happiness for the greatest number'. It was at basis an illogical doctrine and in practice its results were often disastrous. On the matter, for instance, of combination of workpeople to secure higher wages, economists spoke with a divided voice. Some believed workmen should be free to combine and that to prevent

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them was to interfere unjustly with 'economic forces'. Others held, and still hold to-day, that a combination of workers is itself an interference with economic forces and therefore not in the best interests of the community. Nassau Senior, Professor of Political Economy at Oxford University, was quoted solemnly in Parliament to support the contention that if children's hours were cut down in factories, manufacturers would all go bankrupt. Finally Malthus, the gloomy parson, came on the scene to prove that if decent wages were paid to workpeople the population would increase beyond all bounds and drive them down again by sheer force of competition unless wars and pestilence intervened to keep the population within reasonable bounds. These unpractical theorists, basing their arguments chiefly on airy generalizations without any reference to fact, seemed incapable of appreciating the simple truth that since man's intelligence had invented industrial machinery and organization it was also capable of changing it and modifying it for the good of society. Their doctrines were only accepted because they justified the most avaricious side of human nature by a cloak of scientific approval and left employers free to exploit and ill-treat their employees as they liked and as their selfishness and ignorance dictated. Unlike these prophets of self-interest, Robert Owen was a practical man of business, who proved his theories in his own factories and so had a right to speak of them. Unlike the doctrinaire pessimists of his age he was a sublime optimist and believed in the best, and not the worst, in human nature. Give people a fair chance and the right environment, he said, and they will become decent and reasonable human beings. Give them the worst and they will become criminals. Even to-day his lesson has not been fully learnt though undoubtedly its acceptance is increasing. Robert Owen has been called the father of Socialism and the founder of the Co-operative movement. . . . His best work was done, however, as a capitalist employer. Later when he tried to found Socialist communities in America he proved pathetically unsuccessful. Like many men who have achieved success on their own merits and individual genius, he allowed his vanity to run away with him and outstrip his practical common sense and experience of

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human nature. His lasting contribution to industrial progress lies in the example he set to other enlightened employers to treat their workpeople not as beasts of burden or machines, but as human beings and partners in industrial enterprise whose physical and mental welfare was as important as that of those who employed them.

Later economic theory, which crystallized in the writings of Jevons and Alfred Marshall, drew attention to the fact that wealth is the result, not of one section of the community's efforts but of the combined forces of capital, labour and natural amenities. Therefore it is as unjust to distribute all the wealth resulting to any one factor whether it be labour as Marx taught (following Ricardo) or Capital, as the *laissez-faire* school believed was inevitable.

To-day it is recognized that, while Capital deserves its due reward from industry, labour, skill and executive ability also have an important claim on the fruits of their joint undertaking, and that the increased output of labour made possible by the application of machinery should be distributed equally among all these factors and not go only into the pocket of the machine-owner. One of the forms in which this redistribution has shown itself is in the increase of welfare amenities in the locality of work for the operative: in the provision of rest rooms, canteens, recreation facilities, medical services, education and a host of other benefits to the employee. At one time these things were viewed with a certain amount of suspicion by the worker, who saw them as devices to hoodwink him or her into taking a smaller pay-roll or to cover up other deficiencies in terms of employment. To-day, however, particularly since the impetus given to the movement by the two European wars, these amenities have come to be looked on, and rightly so, as part of the normal requirements of an industrial undertaking by the worker; while the employer is coming to realize that the comfort and well-being, both physical and mental, of his employees, is an important factor in the efficiency and smooth running of his firm. That these ideas took a long time to develop will have been seen and will be seen in the foregoing and subsequent pages. It was, however, with Robert Owen that the seed took root of a practi-

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cal welfare movement, which has now branched and blossomed in several directions, including those of welfare as a benevolent gesture, the science of personnel management, the study of efficiency, scientific management and industrial psychology. All these activities centre on the individual worker and consider him not merely as a machine nor merely as an animal, but as a thinking and feeling agent in a complex industrial process, whose ability to think and feel are not obstacles, as was seriously believed by many employers in the past, but aids to his greater industrial and social efficiency.

The full implications and development of this process unfortunately lie beyond the scope of this book which, however, though dealing mainly with the mechanical and animal side of welfare cannot ignore its psychological aspects.

RESPONSIBILITIES OF EMPLOYERS

It was at this time in the history of our subject that psychological considerations began to enter seriously into the mind of the more enlightened employer. In some of his wiser ordinances, Ambrose Crowley of County Durham, anticipated this by a hundred years or so. Employers were beginning to gain a new sense of responsibility, a responsibility which in the Middle Ages was forced on them by the guild system, but which had largely fallen into abeyance since its decline. It is true that the outburst of public indignation against the revelations of conditions of employment in factories and mines did much to remind employers that they had a duty to society as well as themselves, but it is also true that employers themselves were shocked and horrified to find what iniquities were being practised and that a feeling of apology began to show itself on the part of employers who struggled to make amends for past offences whether of their own commission or of others of their fraternity. A typical example of such a change of heart was the elder Sir Robert Peel, who, while far from being a model employer himself became the most active reformer of factory law of his day. Lord Shaftesbury himself was horrified by the conditions of his own family's farms and tenancies and, in spite of being heavily in debt at his father's death, made every effort to become a model landlord

Responsibilities of Employers

and employer of agricultural labour. Cobden and Bright who had, as representatives of the manufacturing interests of the North and Midlands, opposed Lord Shaftesbury's reforms at the outset, eventually became enthusiastic supporters of them and used their power to better the conditions of employees whenever they could. Also the movement for Free Trade which they sponsored and eventually brought to success, though it started as a means of increasing the profits of manufacturers ended by becoming a liberation of the working people of England from an almost intolerable tyranny, the tyranny of highly taxed food obtainable only at prohibitive prices coupled with wages so low, that even at normal times they would barely serve to keep their recipients from starvation.

Throughout the early part of the nineteenth century, as we have seen above, the ruling classes were obsessed with the fear of revolution in England on the lines of that in France. Fear made many otherwise kindly people unbalanced, and a savage reactionism set in, which only exacerbated the feelings of the already half-starved people. The massacre of women and children by the soldiery at St. Peter's Fields, Manchester, in 1819, at a perfectly peaceful meeting, was a typical result of this terror as were the official congratulations sent by the Home Office to those responsible for it. In truth, looking back, it appears that the chief reason that the English working class did not rise up against their oppressors in these dark years was that they were so ill-nourished and overworked that they had no energy left for action or effective revolt. For this reason the work of their release was left to far-sighted and public-spirited members of the very class which oppressed them, such as factory owners like Sir Robert Peel, Fielden and Owen, Lord Shaftesbury the peer and landowner, and Cobden and Bright, representatives of the manufacturing interest.

Just how appalling were the conditions under which the labouring classes lived in the early part of the nineteenth century is admirably illustrated by a book entitled *The Hungry Forties*, which consists of letters written at the beginning of the next century by those who remembered and had suffered under those conditions.

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In a commentary on these letters Mr. Brougham Villiers wrote words which, strong as they are, are still inadequate to convey the true horror of the privations they describe.

'The letters printed in the foregoing chapters read like the records of a besieged city. They describe a state of things enduring not for weeks, but for a full generation, in which the tragedy of poverty had become nearly universal. . . . Upon the whole, we are convinced, our country has never passed through so terrible a time before or since. Right through the Middle Ages sporadic famines occurred, and there were years of terrible dearth, due to defective harvests, but so continuous a period of systematic underfeeding of the whole nation never before occurred. Sooth to say there was some foundation for the plentiful beef and ale with which we, as a people, were once credited. Thorold Rogers and Professor Ashley alike insist that the England of the Middle Ages were well fed. The peasantry of the Early Plantagenet times, according to the latter, lived in a State of "rude plenty", while Rogers has extolled the fifteenth century as the "Golden Age" of the British working man.

'But from the time of the Reformation there had been a steady decline in the material well-being of the British working class. Their organizations had been broken up in the villages and had become, in the towns, close corporations, to which the poor man had no access. He was left to face the Industrial Revolution with no trade or other organizations of his own, and with the machinery of the State in the hands of the class most hostile to him. The great war with France had raised corn to famine prices, and accustomed the landlords to enormous rent-rolls which they desired to retain in time of peace. This could only be done by some system reproducing the economic conditions which the termination of the war would otherwise have ended. In other words the island, since it was not now besieged by its enemies, must be besieged by its rulers. Tariffs must undo the mischief wrought by peace and make dear the produce of the land.

'The calamity which the Corn Laws inflicted on the people found them rather prepared to endure than resist. On the one hand they had, as we have seen, no organization or political

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power. The protests of the working class then could only take a form essentially anarchic in character. There is no doubt that, from the first, they were bitterly opposed to the bread tax; but their only means of resisting it were by bread-riots and chronic law-breaking. But unfortunately . . . they had little power to resist . . . Probably at no time in our history was the poor man of so little account as during the seventeenth and eighteenth centuries. . . . The people themselves had for several generations been driven to solve the problem of living under harder and harder conditions. Their hours had become longer, and their wages, relating to the price of food, lower and lower with each generation. A thoroughly vicious poor law had completed the work begun by the destruction of their democratic organizations and accustomed them to look for work and charity, not to themselves and their fellows, but to the contemptuous patronage of the squires.'

Extracts from some of these letters are given here as a vivid illustration of the conditions which prevailed in Britain's largest industry at the time and because they throw considerable light on the problem of food for the worker a hundred years ago.

The book starts with a few interviews with Sussex labourers and then continues with letters from other parts of England.

A Sussex labourer of Heyshott, Charles Robinson, a woodman, speaking of the 'forties', said wages were 9s. a week, parish work was 7s., working by the piece in the village a man could make 14s. 'You ask what sort of food we had. Well crammings was common. It was made of what was left after the flour and the bran was taken away, and what was left, mixed with a little bread flour, we called crammings, but more often we made a sort of pudding with it. At that time, in the 'forties, in these parts we paid 1s. 2d. for a half-gallon loaf, equal to two quarts; 17s. a bushel, again, was the price of flour. You ask 'ow the people did get on. Well they got into debt, and then again they lived on "taters" and kept pigs, but butcher's meat we never 'eard of, never saw it except in the shops. Salt was 21s. a bushel, and when we killed a pig we 'ad to sell 'alf of it to buy the salt to salt down what was left.'

David Miles, another Heyshott labourer, said: 'I reklects the

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early 'forties afore the Corn Laws wor repealed. "Taters" was what folk lived on then, and the Tories would 'ave it that a red 'errin and a tater wor food enough for any workin'-man. When I wor just on twelve the "taters" failed, and never shall I forgit 'ow the folks went a-wanderin' about, peerin' at the "taters", an' trying to find out what wor wrong wi' em. . . . It wor awful bad for the low class, many of 'em were nigh starvin'. . . . Folks used to put up a little 'ill o' taters for the winter, not two rods from their winders, but people 'ud come by night and steal 'em. A 'ungry belly makes a man desperit. They'd steal a'most anything even bees and brocli from the garden. When a man 'ad a large fa'am'ly, they were pretty nigh starvin' mostly. As for meat, a look in at the butcher's shop was all their share o' that. The 'ooman ud cut off the black crust from the loafs and put it in the tea pot and pour water on it instid o' tea: it looked pretty much the same colour, d'ye see: or else they'd beg tea leaves from the big houses.

'Ten hours a day is what we worked a threshin' corn in the farm. . . . I got a job six and a 'alf mile away, and that seemed a fair step, I can tell 'ee . . . but I used to pass a 'ooman on the way what 'ad to dig up turmuts wid white frost on 'em, and I wouldn't 'a 'ad 'er job, bless 'ee, for a pound a week, that I wouldn't. 'Oomen used to 'ave to go weedin' in the corn in them days.

'When Mr. Cobden come 'ere Tiller and fifteen more wor a-breakin' stones on the road for eightpence a day, that's just all they could get. . . .'

Charles Astridge, ex-postman, told of labourers sitting under a hedge eating a dinner of bread and apple. He himself had eaten porridge made out of bruised beans 'that made your inside feel as if it was on fire and sort of choked 'ee'. Children would pick up bits of bread and potato peelings. About a week after the repeal of the Corn Laws, Astridge describes the village baker 'comin' along the village street with a cart full of half-quartern loaves, which he sold for fourpence each'.

Thomas Wrapson, wood-sawyer of Heyshott, describes how the children would go into the fields and 'sneak' turnips and have them for supper with a bit of bread.

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'One farmer never gave more 'n a shilling a week to 'is carter . . . a shillin' a week and their board, and some farmers they give eighteenpence and their board.'

Joseph Boddington of Northampton wrote that in 1833 he went to work. His family lived on barley bread. Yearly wages at nineteen were £4 15s. od. (with board). At twenty-four he got 6s. 6d. per week with board. At twenty-four he got married on 8s. a week because the farmer could not keep on a single man.

William Prestridge: '4 lb. loaf 11½d., tea from 5s. to 8s. a lb.; "vile sugar" at 9d. per lb. Wages 9s. a week. They lived on one ounce of tea and 1 lb. of bacon a week with a dish of swedes thrown in. Labourers got barley and wheatbread and small beer in the farmer's barn. They had tea-kettle broth for breakfast'.

Richard Rigg of Redbourne, Herts, born 1804, 'worked early'. Remembers bread at 1s. 6d. (quartern loaf). Worked as ploughboy for free food and wages. At sixteen, worked for £5 a year with free board. Married in 1826 earning 9s. a week, reduced to 8s. 'We were half-starved.' 'In the potato famine year of 1845 I remember our trying to make potato flour by grating the half rotten potatoes into a large tub full of water.'

Another letter describes how, in 1829, the cost of tea landed in Liverpool was under 10d. per lb. and the duty was 2s. 1½d. a lb.—a £3 chest of tea was increased to £8.

A.J.M. of Northampton writes of the 50's: 'The principal course at the morning meal would be a small basin of bread soaked in water and seasoned with salt, occasionally a little skimmed milk added and a small piece of bread tinged with lard in winter. During the summer we might occasionally get plain pudding—flour and water—or pork dumplings—sometimes both, with potatoes or onions added to fill the crust. The last course, except the dessert of potato soup, etc., might be potatoes and meat—pork—"you should have seen the joint". "We might get 2 lb. per week. "Tea", such we called it, bread and potted butter. I never remember grumbling about this being sparingly spread, it was at times so rancid. "Supper"? Well, sometimes I used to transgress by staying out late, or I might get something very much like a small piece of bread and a little piece of pork rubbed over it. Sunday was a high day of

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course. We might get a penny black pudding for breakfast (one between four or five of us with a small piece of fried pork), suet pudding and a pig's foot for give of us to feast thereon. Beef? Yes, we might get a small piece at our feast and a bullock's heart at Christmas. We did occasionally get a pennyworth of bullock's liver if we happened to be going to town—about three miles—for the doctor during the week. Beverage? Well, yes, we used to have as much as 4 oz. of tea and 2 of coffee for three weeks. 1 lb. of sugar per week . . . as an additional drink we had mint-tea for summer, and we might get toast and water, especially when ailing, in winter.'

Mr. Tiddymont of Norfolk: 'My father was a ploughman and his wages 7s. per week, a wife and three children to keep and pay rent. My mother used to go to the fields and glean, which she had a perfect right to do, to keep us alive; and one day when thus engaged, the steward came riding into the field and brutally beat my mother with his riding whip, and shouted her out of the field. . . . I have a very distinct recollection of dumplings made of barley meal, and it was with some difficulty I got my teeth through them. Then we had some potatoes and sometimes we found a swede in the road having fell off a farm cart. That was a treat indeed! This was our usual weekday fare. . . . A simple herring between five of us constituted our Sunday dinner. Tea was made with burnt crusts of bread. This was our lot of semi-starvation and slavery.' A man and his boy earned 16s. a week between them and their bread bill came to 15s. 4d. a week.

A parson gives this invoice for a Children's Sunday School treat before 1846:

	s.	d.
2 pecks of fine flour @ 6s.	12	0
6 lb. currants @ 1s.	6	0
6 lb. sugar @ 8d.	4	0
1 lb. caraway seeds @ 1s.	1	0
Salt and barm		6
	23	6

Edward Coole of Suffolk: 'I can safely say during the first

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eighteen years of my life my belly had not been properly filled eighteen times since I was weaned. . . . Scores and scores of times I have sat under the hedgerows and cried, and told God how good I would be if He only sent me bread.'

G. Nuffel writes of Suffolk, about 1825, saying: 'At that time wheat was about 10s. per bushel, pork 3d. a lb., beef and mutton 3d. to 4d. per lb., eggs 30 for 1s. butter 7d. per lb., cheese 1½d. to 2d. (called Suffolk loaf), men's wages 7s. to 8s. per week.'

Mr Harry Banham of Caston wrote: 'For years I never knew the colour of money, I worked in the mill, and was allowed a certain amount of flour each month in lieu of wages. . . .'

Mr. Mark Moore of Great Creminham: 'The staple food of the people was rye-bread. Sometimes that was none too good after a wet harvest. Then when people put their bread into a basin of milk it would sink to the bottom like lead. I have known rye-bread to be so doughy that the knife with which it was cut had to be cleaned at each slice taken.'

Another writer said that if you took the crust off the bread and threw the rest at the wall it would stick.

E. C. Gosney of Hampshire: 'I recollected mother getting once a pound of bacon for dinner on Sunday: but a pound divided among six was not much; and for dinner on weekdays at times was potatoes with one pennyworth of suet fried, and the fat poured over the potatoes after being mashed. My mother often cried to think that all she could get for my father's dinner was a penny bloater, and he had to work 12 hours a day, and, of course, the children's dinner was only potatoes and salt. But for the whole of the time we did not have enough to eat.'

A. S. Ashton of Leeds says, 'There were 2,000 homes empty in Preston in 1841. In Leeds in 1841 there were 20,000 people whose average earnings were under 1s. a week. In Birmingham, one-fifth of the population were in receipt of parochial relief. . . . In Manchester 12,000 families after having pawned any article of furniture and of dress with which they could possibly dispense, were supported by voluntary contributions. In Bolton, in 1842, "1,500 homes in the borough were unoccupied". The earnings of 1,000 families averaged only 1s. 2d. per head per

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week, more than half the beds in their possession were filled with straw and they had among them 466 blankets.'

Mr. Glazier says that: 'Up to, and for some time after, 1846 the standard rate of wages for carpenters, joiners, cabinet-makers, masons, bricklayers, plasterers, plumbers, painters, wheelwrights, coopers, blacksmiths, etc., was 18s. for a sixty-four-hour week—i.e. $3\frac{3}{4}$ d. per hour: This after seven years apprenticeship and a premium of £20 to £50. Unskilled and farm labourers got 10s.'

A correspondent, a grocer, gives this list of prices of groceries in 1820 compared with 1903:

	s.	d.	s.	d.
2 lb. lump sugar @ 1s.	2	0		5
3 lb. moist sugar @ 9d.	2	3		6
$\frac{1}{2}$ lb. tea @ 8s.	4	0	10	
1 lb. yellow soap		10		3
1 lb. currants	1	1		4
14 lb. salt	4	9		4
3 lb. candles @ 9d.	2	3	1	$1\frac{1}{2}$
$\frac{1}{2}$ lb. ground coffee	1	8		9
1 lb. starch		11		4
$\frac{1}{4}$ lb. pepper	1	0		5
1 lb. raisins		10		5
	<hr/>		<hr/>	
	£1	1 7	5	$8\frac{1}{2}$
	<hr/>		<hr/>	

An interesting picture is given of a journeyman baker's life in 1833: 'Every night the bakers had to begin work at 10 o'clock at night, and when the dough was made, had a mouthful of supper and then lay down on the bare boards, with a sack above us until the dough was ready, when we commenced and worked making bread and serving customers until seven or eight o'clock in the evening.'

FURTHER EVIDENCE OF UNDER-NOURISHMENT

As a commentary on the picture given of food habits and conditions of the labouring classes in the first half of the nineteenth century in *The Hungry Forties* sponsored by Mrs. Cobden-Unwin and Mr. Brougham-Villiers, it is interesting to

Further Evidence of Under-Nourishment

quote Sir Jack Drummond and Miss Wilbraham on the same period:

‘The staple food of the working man’, they write, ‘was still bread. Often in the hard times, particularly early in the century, it was all he got, unless he was lucky enough to be a countryman with a small plot in which vegetables were grown and a pig reared’. It seems to have been exceptional to find conditions as good as those observed by Cobbett at Singleton in Sussex in 1823, of which he wrote:

‘There is an appearance of comfort about the dwellings of the labourers, all along here, that is very pleasant to behold. The gardens are neat, and full of vegetables of the best kinds. I see very few of “Ireland’s lazy root” (potatoes). . . . A young man . . . came running to me with his victuals in his hand, and I was glad to see that his food consisted of a good lump of household bread and not a very small piece of *bacon*. . . . I saw, and with great delight, a pig at almost every labourer’s house. . . . What sort of *breakfast* would this man have had in a mess of *cold potatoes*?’

‘Some writers’, continue Drummond and Wilbraham, ‘in the early part of the century would have us believe that the countryman’s diet usually consisted of bread, potatoes, vegetables and bacon.’

The authors then quote from a magazine called *The Family Oracle of Health*, a paragraph which reads: ‘The diet of persons who live in the country is, in general, more wholesome than that of those who inhabit towns. A large proportion of it consists of fresh vegetables and milk, which, though not excluded from the food of those who live in towns are enjoyed in much greater plenty and higher perfection in rural situations.’

‘This may have been the superficial impression of the town dweller’, comment Drummond and Wilbraham, ‘but there is greater weight of evidence in support of Cobbett’s view that such cases were exceptional. . . . In general, it can be said that the poor country people were living at that time on bread alone and that only rarely could they afford meat or beer. It is certain that milk very seldom came their way except in the outlying districts of the north and west, or in Scotland’.

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In fact, we know that in the south it was the habit of the farmers to feed any surplus milk left over from their supply to the towns, to their pigs. The labourers went without.

Cobbett was told by a man who was hedging by the roadside that he got 1s. 6d. a day. The man said the *allowed* wages were 7d. a day for the man and a gallon loaf a week for the rest of his family. 'That is to say', says Cobbett, 'one pound and two and a quarter ounces of bread for each of them, and nothing more, and this observe, is one-third of the bread allowance of gaols'.¹

'The poor people', writes Drummond and Wilbraham, 'were somewhat better off in the second half of the century when conditions began to improve. The labourer was able to eat vegetables more frequently and to afford meat for his Sunday dinner. Edward Smith, who had studied the diets of the poorer people, said in 1864 that most farm labourers enjoyed one hot meal a week.

'In the same year a committee appointed to report on the state of prisons was asked by the Home Secretary to consider the diet of prisoners in the light of the meals required by a free labourer. Their reply is interesting:

'“It is extremely difficult to ascertain what the ordinary food of free labourers is. Even if the inquiry was limited to the class of free labourers which is known to be the worst fed, namely agricultural labourers, the true facts of the case would not be readily obtained. And even if it were to appear that, as a class, their food was badly chosen, badly cooked, and insufficient in quantity . . . it would not be incumbent upon us in framing dietaries for prisoners, to imitate their bad example, or to conform ourselves to their exceptional circumstances.”'

In his lecture on the 'Economy of Food', W. Letheby, in 1857, estimated that the food of a labourer for one week consisted of 20 lb. of bread, 6lb. of meat, 3 lb. of fat, 12 oz. of cheese, 4 oz. of butter, 1 oz. of tea, 4 oz. of coffee, 8 oz. of cocoa, 2½ gallons of beer, and 4 lb. of vegetables.

Drummond and Wilbraham stigmatize this estimate how-

¹ See *Rural Rides*, 12 November 1825.

Town Feeding

ever as 'hopelessly inaccurate', a verdict amply borne out by Mrs. Cobden-Unwin's researches recorded in *The Hungry Forties*.

'It is interesting to note', continue Drummond and Wilbraham, 'that the diet of the farmhands in some parts of Scotland and the far north of England had not changed for centuries. They still lived principally on oatmeal, milk and vegetable broths. This was due, in no small measure, to the survival of the primitive system, still operating to-day in some parts of Scotland,¹ of providing the men working on the estate with food in part payment of their wages.² As a result the Scottish labourers were men of much finer physique than the southerners. Frank Buckland, at one time medical officer to the Guards, described the weedy condition of the English recruits compared with the hardy and well-built men from the Scottish farms. The Irish appeared to be strong and fit when they joined the colours, but their health often broke down on the Army diet of bread, meat and potatoes.'

TOWN FEEDING

Sir Jack Drummond states that during the first half of the nineteenth century 'the diet of the poor people in the towns was terribly bad. The greater part of their nourishment came from bread, potatoes and strong tea'

The *Family Oracle of Health* stated that the use of tea 'with bread and butter, as the *almost sole* food of the working classes in manufacturing towns, is a leading cause of the extension of scrofula among the mass of their population'.

According to Drummond, 'the consumption of tea was by this time enormous, and later it increased still more. By 1871 it was nearly four pounds per head of the population'. Tea was popular because it gave a 'deceptive feeling of warmth' and made up for lack of food. Even tea, however, as we have seen,

¹ Drummond and Wilbraham's book, *The Englishman's Food*, appeared in 1939.

² Professor Jones, late Leeds University, gave an interesting example of this to the present writers recently in connection with an Agricultural Wages Committee of which he is a member in Yorkshire.

Robert Owen and the Nineteenth Century

was largely denied to the poor until the tax was removed with the advent of free trade.

Dr. James P. Kay (afterwards Sir James Kay-Shuttleworth), describing the daily life of a Manchester operative in a pamphlet written in 1832, said he rose at five o'clock in the morning, worked in the mill from six till eight and then returned home for half an hour or forty minutes to breakfast. This consisted of tea or coffee with a little bread. He then went to work until 12 o'clock. At the dinner hour the meal, for the inferior workmen, consisted of boiled potatoes, with melted lard or butter poured over them, and sometimes a few pieces of fried fat bacon. In the case of those with greater incomes there was a larger proportion of animal food, but the quantity was small. Work went on again from 1 o'clock to seven or later, and the last meal of the day was tea, often mingled with spirits, accompanied by a little bread.¹

Friedrich Engels, the collaborator with Karl Marx, gives a terrible picture of the conditions of life among the working population in the 'forties, which, though one would like to believe it, is not due to the emotional exaggerations of a political agitator, as corroborative evidence shows. He is quoted seriously by Sir Jack Drummond as writing the following words:

'Descending gradually, we find the animal food reduced to a small bit of bacon cut up with potatoes; lower still, even this disappears, and there remain only bread, cheese, porridge and potatoes, until on the lowest round of the ladder, among the Irish, potatoes form the sole food.'

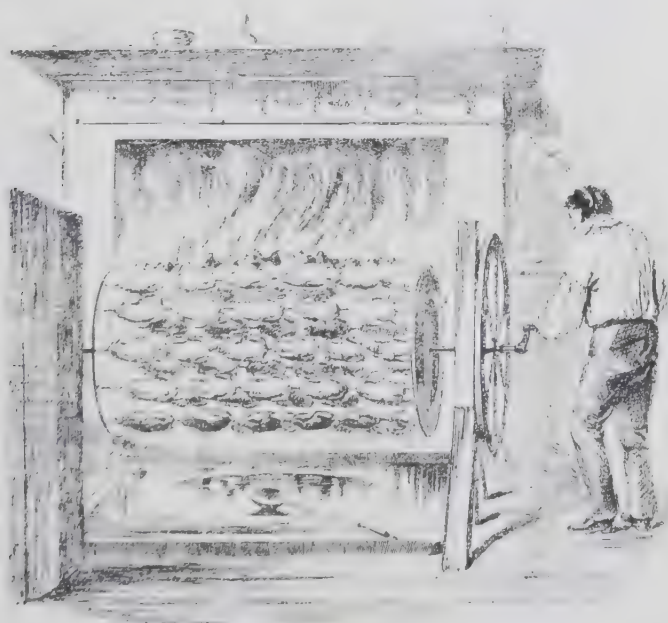
Writing in 1842, Combe, the author of *The Physiology of Digestion*, stated that many of the poor townspeople were living entirely on potatoes and porridge. Engels describes the poor of London collecting potato parings, rotten vegetables and vegetable refuse to 'eke out their miserable diet', in the words of Drummond and Wilbraham.

The potato blight of 1845-6, beside causing widespread famine in Ireland, also caused grave epidemics of deficiency diseases such as scurvy and hunger-oedema in English towns. A revival of interest was effected in ideas of providing nourish-

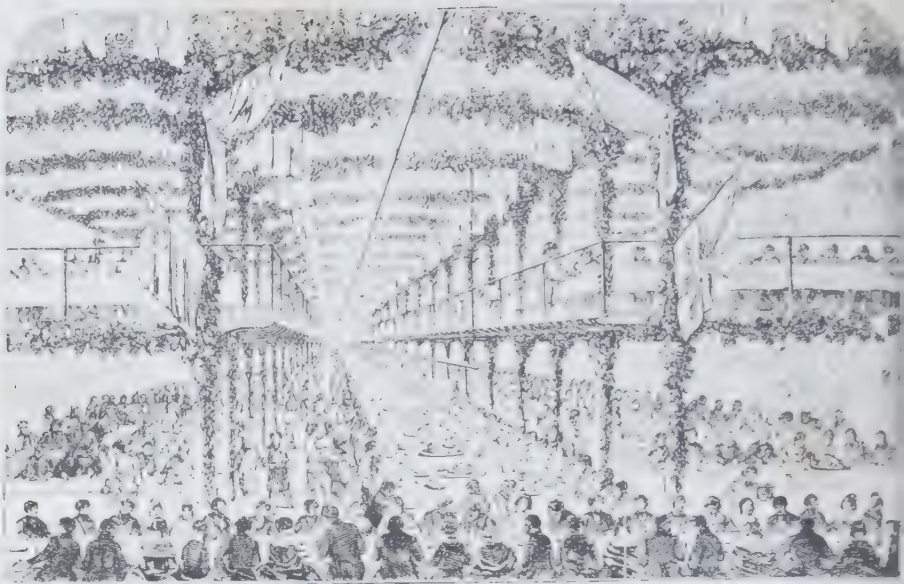
¹ *Vide*. N. P. Gilman, *A Dividend to Labour*, pp. 33-4.



7. Dining-room for foreign workmen in the City
(*mid-nineteenth century*)



8. Roasting fifty geese at once for the inmates of the old men's
Hospital, Norwich (*mid-nineteenth century*)



9. Festival at Messrs. Ransome's and May's at Ipswich
(*mid-nineteenth century*)



10. The employment of women at pit mouths —breakfast time
(*late nineteenth century*)

Town Feeding

ing soups for the poor, most of which, like that of the American adventurer, Count Mumford, were hopelessly inadequate. This Mumford had boasted half a century earlier that he had fed the inmates in the house of Industry at Munich for two farthings per head per day, on a soup made of peas, bread cuttings, and barley. In 1823, one of Mumford's recipes was tried on the inmates of Millbank Penitentiary. These people had been used to receiving 20 oz. of bread, 1 lb. of potatoes, 3½ oz. of meat, 2 pints of gruel, and one pint of broth daily. Under Mumford's scheme of economy they were given 21 oz. of bread, 1 pint of gruel and some two pints of broth made with two ox-heads for every 220 persons. Not surprisingly, as Drummond tells us, the prisoners contracted 'sea scurvy, bloody-flux, and weakness of sight'. Of 850 prisoners, 200 became ill and 37 died.¹

After 1860 rising wages and falling prices improved the diet of the townspeople somewhat, but bread remained the chief item of consumption until the end of the century. In the late 1860's canned meat foods began to appear in this country at lower prices than fresh meat.

Fresh milk was still dear and scarce in the towns though its necessity for growing children was beginning to be realized. What milk there was, was riddled with infection.

In 1864, Edward Smith described the Lancashire operative's diet as consisting mainly of bread, oatmeal, bacon, a very little butter, treacle, tea and coffee.

Skilled workmen ate butter and often sent Sunday joints to be cooked at the baker's shop. They also indulged in a variety of vegetables. On working days artisans 'often ate their midday meal at a tavern, or a cheap eating-house where an "ordinary" of hot meat, vegetables, bread, cheese, and beet cost from 6d. to 1s. In the evening they would return home to a meal of cold meat, or a veal and ham pie, or a dish of stewed eels, or pickled salmon washed down by the bottled beer with which the larger towns had become familiar in the first half of the century'.²

¹ Drummond and Wilbraham, *The Englishman's Food*, p. 395.

² *Ibid.*

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A 'family economy for moderate persons in a frugal family' of 1824 estimates the following amounts per person per week:

Meat	6 lb., weight undressed
Bread	4 lb. (quartern loaf)
Butter	$\frac{1}{2}$ lb.
Tea	2 oz.
Sugar	$\frac{1}{2}$ lb.
Beer (Porter)	1 pint per day

Another estimate gives the ordinary people's consumption per day as:

Bread	$\frac{3}{4}$ –1 lb.
Meat	$\frac{3}{4}$ –1 $\frac{1}{4}$ lb.
Vegetables (greens)	$\frac{1}{4}$ – $\frac{3}{4}$ lb.
Butter	$\frac{1}{2}$ –1 lb.
Beer	1 pint to 1 quart ¹

Drummond thinks the higher figures are an over-estimation.

In 1824 *The Family Oracle of Health* estimated a reasonable table of fare for an artisan earning only a guinea a week, with a wife and two children, as follows:

	s.	d.		s.	d.
Bread	4	0	Milk		6
Meat	3	0	Vegetables and fruit	1	0
Butter, cheese,			Groceries	1	6
bacon and eggs	1	3	Table beer	1	3

Sir Jack Drummond states that beer was first successfully bottled about 1736 with the intention of exporting it to India. The origin, no doubt, of the puzzling phrase India Pale Ale or I.P.A. Soon after 1800 bottled beers became a flourishing home trade. Gladstone's heavy tax on spirits in 1816 increased the sale of bottled beer at the expense of gin, brandy and whisky, which had up to then been drunk in large quantities mixed with water by the poor.

SCHOOL FEEDING

Dotheboys Hall was unfortunately no isolated example of administration in private boarding schools in the nineteenth century. Lord Shaftesbury, before he went to Harrow, was sent

¹ Drummond and Wilbraham, *The Englishman's Food*, p. 396.

Service Diets

to a school which he often said might have been taken as its prototype. There was an idea prevalent that the enjoyment of good food by children, as by malefactors, was likely to stimulate them to evil. The value of fruit and vegetables as containing vitamins and anti-scorbutic properties was not realized. The food at Christ's Hospital in 1816 was such as to cause a mild form of scurvy through lack of vegetables and fruit. Eighteen years later it had not improved and the *Lancet* criticized it severely. The average public school diet was porridge, bread and butter and beer or tea, for breakfast; meat and a few potatoes followed by a stodgy pudding or cheese for dinner; and for supper a repetition of breakfast. Tuck boxes and tuck shops were not luxuries but necessities to make up the necessary calories required by growing children. When the Governors of Christ's Hospital, in reluctant response to the *Lancet's* criticism, amended the school dietary 'beyond fair exception' in their own words, they actually reduced the calories from 2,050 to 1,950, and considerably curtailed the vitamin supply.¹ The amount of calories reckoned as being necessary for a man doing a normal amount of work is 3,500. A child of ten requires about 2,000 calories per day.² It can be seen, therefore, what acute deficiencies were likely to arise when such a diet was applied to growing boys of fourteen and fifteen upwards.

SERVICE DIETS

In 1811 the diet provided by the Navy amounted to only 2,800 calories daily, whereas the hard physical work entailed in a sailor's life required at least 4,000 to 4,500 calories. The actual diet which cost 1s. 3½d. a head per day, was:

Bread	16 oz.	Butter	$\frac{7}{8}$ oz.
Beef	4½ „	Sugar	$\frac{7}{8}$ „
Pork	2¼ „	Cheese	1¼ „
Flour	3 „	Beer	1 quart
Suet	¼ „		

Small quantities of pease, oatmeal, raisins and vinegar were also included.

¹ Drummond and Wilbraham, *The Englishman's Food*, p. 406.

² *Ibid.*, p. 486.

Robert Owen and the Nineteenth Century

The Army ration at this time was 1lb. of bread and 1 lb. of meat per day. The men had to supplement their rations from their own pockets. How acute was the underfeeding can be shown by the fact that a strapping young man like William Cobbett broke down and wept when, as a soldier in Canada, he found his money, with which he had intended to buy himself extra food, had been stolen.

At the opening of the Crimean campaign rations of British troops were, on paper, 1½ lb. of bread, or 1 lb. of biscuits and 1 lb. of fresh or salt meat a day. 'Apart from any question of vitamins', comments Sir Jack Drummond, 'this was quite inadequate. It supplied scarcely 2,500 when at least 4,500 were needed'. The health of the men soon deteriorated. Lord Raglan, inspired by the better health of the French troops, added 1 oz. coffee, 1½ oz. of sugar, 2 oz. rice or Scotch barley, and an additional ½ lb. of meat. This brought the calories up to 3,200—hardly enough for a man leading a sedentary life. The French kept their health by 'scrounging' all available vegetables in their neighbourhood. The English, less enterprising, soon contracted scurvy. Lord Raglan's attempts to get fresh vegetables from Varna failed. Twenty thousand pounds of lime juice reached the base at Balaclava in response to an urgent appeal, but got no further. Other potential anti-scorbutics met the same fate, with the result that Florence Nightingale gave it as her opinion, in her evidence before the Commission of Inquiry into the mismanagement of the Commissariat during the Crimean War, that more loss of life was occasioned by scurvy among British troops than by any other cause.¹

WORKHOUSES

Workhouses in the early nineteenth century probably did not provide so badly for their inmates as after the Poor Law Amendment Act of 1834, when the hated 'Bastilles' were erected, a typical example of which was described by Dickens in *Oliver Twist*. In 1823 Drummond quotes the weekly fare of the Institution of St. Anne's, Westminster, as being as follows:

¹ Drummond and Wilbraham, *The Englishman's Food*. p. 473.

Service Diets

Sunday	7 oz. of boiled beef or mutton, with vegetables. 1 pint of broth. 13 oz. bread, and 2 pints of beer.
Monday	1 pt. of milk pottage, 3 oz. of butter, 3 oz. of cheese, 13 oz. bread, 2 pts. of beer
Tuesday	7 oz. of boiled beef or mutton, with vegetables, 1 pt. of broth, 13 oz. bread and 2 pts. of beer.
Wednesday	1 pt. of pease soup, 13 oz. bread, 2 pts. of beer
Thursday	7 oz. of boiled beef or mutton, with vegetables, 1 pt. of broth, 13 oz. bread, 2 pts. of beer
Friday	3 oz. of butter, 3 oz. of cheese, 1 pt. rice milk, 13 oz. of bread and 2 pts. of beer
Saturday	1 pt. of milk pottage, 12 oz. suet pudding, 13 oz. of bread and 2 pts. of beer

The governing classes, however, were convinced that the ills of the poor were largely due to high wages and overfeeding. Lord Radnor states that the inmates in the Dudley workhouse were suffering from 'dyspepsia', due to overfeeding, though, in fact, Drummond estimates the recorded diet only provided 2,000 calories, or barely sufficient to support a child of ten. Medical opinion was ignored. 'There is no doubt whatever', writes Drummond and Wilbraham, 'that for a good many years after (1834) . . . the inmates (of institutions) were half-starved on diets composed largely of bread, gruel and thin unnourishing soups.'

'Oliver Twist and his companions suffered the tortures of slow starvation for three months,' wrote Dickens in 1838.

In the North, Drummond estimates the inmates of public institutions fared better than the southerners. They had more potatoes, vegetables and milk. In 1839 the Northern Counties Institution for the Deaf and Dumb, at Newcastle-on-Tyne, gave its residents bread and tea for Sunday breakfast, milk pottage and bread for breakfast on Monday, Wednesday and Friday, and 'a pint of new milk with bread' on Tuesday, Thursday and Saturday. For Sunday dinner at 1 p.m. they got meat pudding and potatoes. On Monday, soup with bread, Tuesday, beef and potatoes, Wednesday, sweetened boiled rice and bread and cheese; Thursday, boiled mutton and potatoes; Friday, mutton broth, with vegetables and bread; Saturday, Irish stew. For supper they had bread and milk every evening except Sunday, when coffee took the place of milk.

PRISONS

Conditions in prisons were abominable. Gloucester County Gaol, Bristol, however, was exceptionally well fed, on paper. The diet there is recorded as $1\frac{1}{2}$ lb. bread and $1\frac{1}{2}$ oz. of oatmeal for gruel daily. On Sundays and Thursdays $\frac{3}{4}$ lb. of beef and 1 lb. of potatoes were allowed for dinner. On Mondays and Fridays, the inmates were given thick pease soup for dinner. On Wednesdays they got $1\frac{1}{2}$ oz. rice and $1\frac{1}{2}$ oz. oatmeal, on Tuesdays and Saturdays 2 lb. of potatoes and $\frac{1}{4}$ lb. of cheese were provided. Thin gruel or broth with bread and an occasional piece of meat or cheese, however, was the usual diet in prisons at this time according to Drummond and Wilbraham.

In 1822 the diet at the Millbank Penitentiary, which had formerly provided about 3,500 calories, was drastically cut by Sir James McGrigor, who decided to eliminate meat and potatoes from the diet sheet. The result in calories was 2,300. The former ample ration of potatoes (1 lb. daily) and vegetables was reduced to almost nil, thus greatly increasing the danger of scurvy. In fact, the diet sheet now read:

In the morning	$\frac{3}{4}$ lb. of bread and 1 pt. of gruel for the males 9 oz. bread and $\frac{3}{4}$ pint of gruel for the females
At noon	$\frac{3}{4}$ lb. of bread and 1 pt. of soup for the males 9 oz. of bread and $\frac{3}{4}$ pt. of soup for the females
In the evening	1 pt. of soup for the males and $\frac{3}{4}$ pt. for the females

The soup was made with 'one ox-head to about 100 Male Prisoners, and the same for about 120 Female Prisoners, and to be thickened with vegetables and Pease, or Barley, either weekly or daily as may be found most convenient'. The following year 448 prisoners showed signs of scurvy and nearly 150 were suffering from dysentery.

Dr. Latham, who was called in to advise, gave it as his opinion that the trouble was caused by the deficient quantity of nutrition in the diet, and suggested that 4 oz. solid meat, 8 oz. of rice and three oranges should be given each prisoner daily. The scurvy soon cleared up, and later the rations were further amended to 6 oz. meat, potatoes instead of gruel for

Prisons

dinner and a quarter of a pint of milk mixed with water and flour.

In 1843 a survey of prison conditions was made by the Home Office inspectors with the result that new dietaries were drawn up on the basis that diet should not be used as a punishment, but should be sufficient to maintain health and strength. 'Slops' were largely eliminated and solid food given instead.

The new diets gave prisoners with sentences over 21 days but under 4 months, 140 oz. bread, 64 oz. potatoes and 6 oz. meat per week, with two pints of soup and 14 pints of gruel. Prisoners over 4 months got 168 oz. of bread, 32 oz. potatoes and 12 oz. meat weekly with 3 pints soup and 14 pints gruel. These prisoners did no hard labour.

Prisoners with hard labour up to 21 days got 168 oz. bread, 1 pint soup and 14 pints of gruel weekly. Those sentenced from 21 days to six weeks, got weekly 140 oz. of bread, 64 oz. potatoes, 6 oz. meat, 2 pints soup, and 14 pints gruel. Sentenced from six weeks to four months, prisoners with hard labour got 168 oz. bread, 32 oz. potatoes, 12 oz. meat, 3 pints soup, 14 pints gruel; over 4 months prisoners got 154 oz. bread, 112 oz. potatoes, 16 oz. meat, 3 pints soup, 11 pints gruel and 3 pints cocoa. Even these diets were grossly inadequate for their purpose, providing only 2,000 calories and the men suffered weakness and loss of weight in consequence.

The appalling state of nourishment among the labouring classes as a whole however is shown by the fact that a Visiting Justice at Reading prison stated that if prison was to deter from crime 'they must cease to supply such an excessive diet as to afford temptation to a poor man to commit crime in order to get into prison'.

Apparently the new diets were largely ignored by the prison authorities who often dispensed with the meat and potatoes as unnecessary luxuries, with the result that outbreaks of scurvy often occurred. Finally in 1863 another committee was appointed by the House of Lords to look into the conditions of prisons and Dr. Edward Smith was invited to advise them on the question of diet. Smith made some interesting discoveries about food values in his study of prison feeding, but unfortunately little attention was paid to his advice.

Robert Owen and the Nineteenth Century

The new diet consisted of 6 to 8 oz. of bread and 1 pint of gruel for breakfast and supper varied to 8 to 12 oz. of bread and 1 to 3 oz. cheese on Sunday. For three days in the week dinner was bread, potatoes and suet pudding for those with longer sentences, and bread and Indian meal pudding for those with shorter ones. For the other three days everyone had bread and potatoes while the longer sentenced ones got soup. Hard labour men got extra cheese, gruel and meat. Actually the 1864 diet produced a slight increase of calories over the 1843 diet though Smith believed it to be worse. Drummond estimates the figures to be: 1843 diet: 1940 calories, 58 gm. protein as against 1864, diet: 2,360 calories, 70 gm. protein. Smith rightly drew attention to the fact that the new diet was still well below that required to keep active men healthy. An interesting commentary was made on this diet about a quarter of a century later by Mr. John Burns when he recalled in Parliament his experience in prison as the result of taking part in the Trafalgar Square labour demonstration of 1887. 'I am not ashamed to say that at one or two o'clock in the morning I have wetted my hands with my spittle and gone down on my hands and knees in the hope of picking up a stray crumb from the meal I had had ten hours before', said the future President of the Board of Trade. 'By that diet you break down and enfeeble a man's constitution.' Surely we can recognize some of the patient scorn of Cobbett in those simple words. In 1880 a great danger of 'beri-beri' was incurred by the substitution of 'white' bread for wholemeal. Five essentials to nutriment were thus either eliminated or reduced to negligible quantities in relation to normal requirements, namely, the two important vitamins, A and B, and calcium, phosphorus and iron.

Further evidence proved that prisoners were being seriously under-nourished and another Commission was appointed. This time medical advice was not ignored and adequate proteins and calories were provided.

As the result of investigations in Scottish prisons by Dr. Dunlop, 3,700 calories was found to be necessary to keep prisoners healthy when doing hard labour and the diet was consequently fixed at this standard.

Workhouse Diets

WORKHOUSE DIETS

Workhouse diets had greatly improved. An inquiry in 1897 led to revision of dietaries which was introduced in 1901. Sir Jack Drummond gives a typical weekly diet sheet of this time:

	<i>Breakfast</i>	<i>Dinner</i>	<i>Supper</i>
Sunday	Bread 8 oz. Margarine $\frac{1}{2}$ oz. Tea 1 pt.	Boiled bacon 3 oz. Pease pudding 12 oz.	Bread 8 oz. Margarine $\frac{1}{2}$ oz. Cocoa 1 pt.
Monday	Bread 8 oz. Porridge $1\frac{1}{2}$ pts.	Potatoes with milk 24 oz. Bread 2 oz. Cheese 2 oz.	Bread 8 oz. Vegetable broth 1 pt. Cheese 2 oz.
Tuesday	Porridge $1\frac{1}{2}$ pts. Skim Milk 1 pt.	Vegetable broth 1 pt. Bread 4 oz. Cheese 2 oz.	Bread 4 oz. Porridge $1\frac{1}{2}$ pts.
Wednesday	Bread 2 oz. Porridge $1\frac{1}{2}$ pts. Treacle $1\frac{1}{2}$ oz.	Boiled bacon 3 oz. Bread 4 oz. Potatoes 12 oz.	Porridge $1\frac{1}{2}$ pts. Skim milk 1 pt.
Thursday	Porridge $1\frac{1}{2}$ pts. Skim milk 1 pt.	Coffee 1 pt. Bread 8 oz. Cheese 3 oz.	Bread 8 oz. Vegetable broth 1 pt.
Friday	Bread 2 oz. Porridge $1\frac{1}{2}$ pts. Treacle $1\frac{1}{2}$ oz.	Boiled bacon 3 oz. Bread 4 oz. Potatoes 12 oz.	Bread 6 oz. Gruel $1\frac{1}{2}$ pts.
Saturday	Bread 4 oz. Porridge $1\frac{1}{2}$ pts.	Vegetable broth 1 pt. Bread 4 oz. Cheese 2 oz. Suet pudding 8 oz.	Bread 8 oz. Skim milk 1 pt.

4 oz. of bread and $1\frac{1}{2}$ oz. cheese was also allowed daily for lunch. Drummond states that the caloric value of these meals was quite adequate. The feeding of children in public institutions had also considerably improved.

Chapter VII

THE NEW SPIRIT IN INDUSTRY

A REVIEW OF PROGRESSIVE DEVELOPMENT

By the end of the nineteenth century the pioneer work of Robert Owen and a few outstanding employers of earlier years was beginning to bear fruit. Two books bear witness to what had been and what was being done as the twentieth century dawned. One was by an American, Nicholas Paine Gilman, written in 1899 and entitled *A Dividend to Labour*. Though it dealt mainly with experiments in industrial co-partnership and profit sharing, it also threw some interesting light on industrial welfare as a whole, including advances in industrial catering. The other book appeared in 1905. It was entitled *Model Factories and Villages*, and gave a comprehensive picture of industrial welfare schemes in a number of countries. The author was Mr. Budgett Meakin, a student and lecturer on industrial conditions. Extensive reference will be made to both these books in the following pages in order to give as accurate as possible a picture of prevailing conditions at the time they were written. A number of firms had been developing new ideas and methods of treatment of their employees which had already made them famous, and were to make them more so. These included Messrs. Cadbury's, Fry's and Rowntree's, all Quakers and all cocoa and chocolate manufacturers. Messrs. Lever Bros., of Port Sunlight, had also made great strides in industrial welfare as had Messrs. Colman of Carrow and a number of other enlightened employers. Messrs. Colman had.

War and the Industrial Canteen

early in the century, been in the habit of supplying pork to their workers and their families for their Christmas dinners. 'Pigs were kept at Stoke,' wrote the daughter of Jeremiah James Colman in a memoir of her father published in 1905, 'partly to consume the refuse fibre from the starch, and at Christmas each workman had a gift of pork varying in size according to his family, an institution which, in a different form, is still kept up. . . . My grandmother's recollections went back to still earlier times when the distribution was made from the scullery at the Mill House. . . . In earlier days still the arrangement for Christmas dinner must have been still more patriarchal in character. James Barnes told me, "When I first went to Stoke (in 1830) we used to get a Christmas dinner in the flour mill, and we have had it in the granary and in the coach-house. The men used to go indoors after dinner and the women used to go into the other room along with Mrs. Colman".' This firm used to supply flour to the workers when the price rose beyond what they could reasonably pay in the open market, at prices within their reach, on the same lines as those already described in the cases of Samuel Oldknow and the London Lead Company. We must return, however, to the beginning of the present century and the end of the last.

INDIVIDUAL FIRMS AND THEIR ACHIEVEMENTS

Describing Messrs. Lever Bros.' works at Port Sunlight towards the end of the last century, Mr. Nicholas Paine Gilman writes, "On a prominent corner stands the village shop, a co-operative store for the community . . . The Girls' Institute . . . has classes in cooking, confectionary, dressmaking, and shorthand. . . . A restaurant furnishes such a meal as the girls desire for dinner for 1d. to 4d. . . . Gladstone Hall is an attractive building which contains a large kitchen and dining-room: here food brought by the employees can be warmed without charge: and a co-operative arrangement provides dinners ranging in price from 2d. to 6d.; there is a special dining-room for women. The Hall is open at the end of the day's business done in it as a place of general resort. Every Thursday evening in the winter months a first-class entertainment is provided by the firm.

The New Spirit in Industry

Sunday evening lectures or concerts are given here, and programmes . . . known as Pleasant Sunday Evenings.'

'In the Belle Sauvage works of the printing and publishing house of Cassell & Co., London (1,000 employees) the visitor finds a kitchen and dining-room where meals are furnished to the worker at cost. . . .'

Describing the welfare activities of Messrs. Hazell, Watson and Viney, the well-known printing and publishing firm of London and Aylesbury, Gilman states: 'A refreshment room has been supported by the company since 1878 at Kirby Street (London) providing light luncheons. There has been a deficit which has been gradually reduced from £420 to £115: if ever there is a profit made it will be applied for the benefit of the employees as at Aylesbury. Here the Company provide four o'clock tea and coffee; the charge is threepence a week for five afternoons for nearly a pint of tea or coffee with milk and sugar. This small charge has more than covered the bare cost of the materials, the firm providing the attendance, gas, and other expenses without charge.'

Saltaire, the model industrial village in Yorkshire, was founded in 1853 by Sir Titus Salt, woollen manufacturer and philanthropist, on the River Aire, three miles from Bradford. 'The works cover ten acres of ground,' says Gilman, 'they are constructed with every appliance then known for the comfort of the 3,000 to 4,000 operatives.' By 1877 eight hundred and fifty 'convenient cottages' had been built. Among other amenities Sir Titus had instituted a 'dining hall where meals could be procured at cost or less, and food was cooked for operatives who brought it'.

At Thomas Adams & Co.'s lace works at Nottingham, Gilman tells us that 'every morning, between ten and eleven o'clock a tradesman visits the warehouse with refreshments. The girls leave their counters and refresh themselves in a large, cool room with a glass of milk and a bun. . . . From four to half-past six, they go down to the tea-room in batches of seventy at a time, each making her own tea from a huge boiler. . . .'

Writing of Cadbury's at this time, Gilman says: 'The sixty acres now the factory property were formerly a country seat,

Individual Firms and their Achievements

Bournville Hall: the works are said to absorb one-third of all the cocoa imported in England. . . . Birmingham owes (Mr. Richard Cadbury) a great educational institution for the working classes, a convalescent home for children and various provisions for the aged: these buildings alone are valued at £70,000.

‘The Cadbury Brothers employ some 1,900 unmarried women, 600 workmen and some 200 clerks. The works proper occupy a site of ten acres. . . . In the busiest part of the year, from September to December, the hours of work are from 6 a.m. to 5.30 p.m. (1 p.m. on Wednesday and 12.30 on Saturday). The girl arriving so early receives a cup of tea and a biscuit. She is allowed half an hour for breakfast, fifteen minutes for lunch, and one hour for dinner. For the other months of the year the hours are from 8.45 a.m. to 5.30 p.m.—1.30 p.m. on Saturdays. . . . Dinner is taken in a great hall (used also for lectures) divided into rooms for the girls, the men, the clerks, and the firm, the fare provided being the same for all. Food brought by the employees will be warmed or cooked free of charge, and meals may be taken outside of the dining-room. The kitchen employs some twenty persons. The tariff is such as to pay the bare cost of the food, other expenses being borne by the firm. Cold meats at 1d. or 2d. a plate; eggs 1d. each; puddings, pies and tarts at 1d.; tea and coffee $\frac{1}{2}$ d. per $\frac{3}{4}$ pint, milk 1d.; and bread and butter $\frac{1}{2}$ d. per slice, will indicate the very moderate prices charged. The girls now bring meat, if they wish it hot: hot joints were formerly served, but the practice was given up as all the girls wanted the best cut. Fruit is liberally supplied all the year round. The girls’ pay is from 1s. 6d. to 2s. higher than in any other business in the Midlands. Two district nurses visit sick girls. . . . The Hall is a home for sixty girls, who pay six shillings a week for board and lodging; the vinery supplies grapes for the sickroom—1,200 bunches were so given out in 1897. The girls are remarkably healthy, the works being well ventilated, warmed and lighted.’ Gilman goes on to describe Cadbury’s housing estate and other amenities which, unfortunately, lie outside our scope at the moment. He sums up by saying: ‘It is not strange that this remarkable combination of business ability and active kindness has produced the happiest

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results. The Cadbury works are not disturbed by labour troubles. The girls are a very cheerful and contented company.'

Going on to describe Messrs. Fry's of Bristol (now amalgamated with Cadbury's) the oldest cocoa firm in the world, having been founded in 1728, Gilman says that at the time of writing they employed 2,000 workers of whom 1,600 were girls. Like the Cadburys, the Frys were Quakers. Work hours were now from 8 a.m. to 5 p.m. with intervals for meals. 'Provision is made for the girls to have dinner inside the works, and at night various classes are held on the premises at which the girls learn sewing, cooking, etc.'

Messrs. Tangyes, engineers of Birmingham, are interesting in that they engaged a contractor to supply meals to their operatives. Gilman describes them as employing 3,000 men in their 'Great Cornwall Works'. Instructional addresses on a wide variety of subjects are delivered in the messroom during the last half of the dinner hour, while the men smoke. This 'messroom or dining-hall accommodates 1,000 persons. With the kitchen attached, it is rented to a contractor who provides meats, pies, puddings and drinks at a low rate. For every person using the room the contractor may receive one penny per week, for which he warms food and supplies hot water for making tea and coffee. Dinner is provided free for some sixty chief clerks and managers. . . . A dispensary was built and equipped by the firm: it is managed by a surgeon and a dispenser whose services are confined to the workpeople and their families.'

In 1905, as we have seen, Mr. Budgett Meakin produced a most interesting book entitled *Model Factories and Villages*, which gives an extensive survey of the methods used by the more progressive firms for the welfare and industrial feeding of their employees. In his chapter on 'meals' he says, 'Good work of whatever nature, ultimately depends on food not only good in quality, but adequate in quantity, and properly consumed under favourable circumstances. A great deal may be done on a cold lunch from pocket or can, partaken of in a yard or out-house, or even down a coalmine, or beside the stilled machinery of a stuffy workroom. But while the first two circumstances do, at least, include fresh air, none of them are ideal, and all are

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capable of improvement to the advantage of the employer as well as the employed. There can be no doubt that regarded as mere machines the same "hands" produce better work, and therefore prove more economical, when "stoked" under better conditions. This, indeed, has passed from the realm of theory, for it is the invariable experience of firms which have made proper dinner provision for their workpeople, and who ascribe so large a proportion of their success to this and kindred measures. This has, apparently, been more fully recognized on the continent than either in England or America, though there the provision is seldom elaborate. . . . ' In France, at the time Meakin's book was written, 'it has been made obligatory on factories to provide dining quarters distinct from workrooms or lavatories.'

The writer goes on to quote a number of Continental examples of feeding accommodation provided for workpeople, which included Messrs. Meniers, Chocolate Manufacturers in France, Messrs. Krupps of Essen (now demolished by Allied bombing) and a considerable number of firms in Germany and Holland. He also describes, at some length, the efforts made by such firms as the National Cash Register Company and a host of others in the U.S.A. All these, however, though interesting for comparison, are outside the scope of this book, and those who wish to study them in detail are referred to Mr. Meakin's comprehensive survey. Coming to the United Kingdom, Meakin goes into greater detail than Gilman, and his descriptions of Messrs. Lever's and Messrs. Cadbury's catering services are worth quoting for amplification. At that time Messrs. Cadburys had the largest dining-halls of any industrial concern in England (this claim has now been superseded by Messrs. Montague Burton, Ltd. of Leeds). Some figures given in one of the firm's own publications show that in 1902 there were 40,610 square feet devoted to catering accommodation as compared with 17,820 in 1886 and 29,020 in 1895. The total employees had increased between 1886 and 1902 from 700 to 3,600. Writing in 1905, Meakin described the dining-rooms as follows: 'The most extensive dining accommodation in the United Kingdom, seldom surpassed anywhere in size and nowhere in provision, is

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at Bournville, where tables for 2,000 of Messrs. Cadbury's girls are in regular use in a fine hall. Food may be brought from home, and either cooked in the kitchen or heated in unique steam cupboards in the room: or it may be purchased at wholesale prices at the counter. To provide the very best at the least possible cost, wholesale buyers are employed by the firm, who make a special point of securing good fruit, which is on sale in the recreation grounds also. On Fridays employees may purchase this to take home in lots of not less than a shilling's worth—equal to much more than that sum would purchase elsewhere—and from the same store the nurses can draw supplies for the sick to supplement that specially grown for them. In the dining hall each article is allotted a special section of the counter, from which the girls help themselves in exchange for tickets varying in price from $\frac{1}{2}$ d. to 1s., which must be purchased beforehand, stating what is required, so that exact provision may be made and waste prevented.

'The moderate prices may be judged from the following examples: roast and two vegetables, 4d.; meat pies, 2d.; pork pie, 1 $\frac{1}{2}$ d.; soup and bread, 1d.; ham, 1d. and 2d.; eggs, sausages, bacon, pudding, pie, tarts, 1d.; tea, coffee, cocoa, milk, potatoes, bread, butter, cheese, jam, cake, or buns, $\frac{1}{2}$ d. Those told off to wait at the counter receive their meals free.

'Second to this in point of size', continues Meakin, 'come Messrs. Lever Bros.' magnificent dining halls at Port Sunlight, each standing by itself in the village outside the works. In the finer of the two, erected at a cost of £18,000, there are seats for 1,500 girls, about half of which only are, as a rule, occupied. Here, again, there is the fullest liberty to bring food and have it warmed or cooked free, all necessary utensils being supplied; but the prices and the quality of the bill of fare prove too tempting to most, as well they may, to judge from the following specimens: meat and potatoes, or "hot-pot" 2d.; pudding, soup, tarts, etc., 1d.; tea, etc., $\frac{1}{2}$ d.'

Meakin goes on to say that the only expense to the firm is the interest on the capital invested in the buildings and fittings because, low as it is, the tariff yet covers cost of material, cooking and attendance. 'It is almost needless to add', continues



11. Service in a modern cafeteria, North London



12. Miners' canteen in Fife, adjoining pithead baths



13. Staff canteen,
North London



14. Attractive furniture in
new canteen dining room



15. Small staff canteen
dining room, London

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Meakin, 'that the kitchen, the "outfit", and the style of the whole are all models of excellence. The men's dining-room nearby, though less pretentious, serves also in winter for concerts and entertainments. Here, on temporary benches and tables, the men—unlike the women—reversing the tendency in America—partake of food brought from home in cans, which is cooked or warmed for them free, hot water also being supplied. For the clerks' club separate dining tables are arranged. All working overtime are supplied with a free tea.'

Another firm mentioned by Gilman, Messrs. Tangyes of Birmingham, is described in slightly greater detail by Meakin. 'The messroom, as it is called,' he says, 'which seats a thousand, is managed on rather a different principle from that usually employed. The well-appointed kitchen and the catering are let out to a contractor, who charges a penny a week to each user of the room, for which he furnishes hot water or warms food if required, and supplies cooked food at the following tariff: Hot meat and two vegetables, 6d.; chop or steak to order, 4d.; bacon and eggs, 3d.; boiled ham or beef, per oz. 1d.; egg, pickle, pie, pudding, custard, tart, cake, etc. or ginger beer, 1d.; tea, coffee, or bun, $\frac{1}{2}$ d. No intoxicating liquors are allowed on the premises, but smoking is permitted in the latter half of the dining hour, and newspapers are provided. Free dinners are supplied to some sixty of the leading clerks and managers in comfortable rooms attached to the offices.'

The firm of Messrs. Hartleys of Aintree, Liverpool, is also described by Meakin as making 'noble provision for the meals of its employees'. 'Here, too,' he continues, 'the dining hall is a handsome building, seating 600, of which any institution might be proud. The number employed in this jam factory varies from 500 to 1,500, according to season, so that when the rush of fruit is on relays have to be arranged. Credit tickets are supplied if required, the value being deducted at the week-end—an arrangement for the special convenience of temporary workers without cash—or money is taken. The charges are: Potato pie, "hot-pot", or sausage and "mashed", 2d.; soup, pudding, meat pie, fruit pie, 2 oz. of corned beef or cheese, mineral waters, fish from Grimsby on Fridays, 1d.; "chip" potatoes or milk, 1d. or

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½d.; lemonade, tea or bread and butter, ½d. "Enough fruit is eaten in the works" is put in quotation marks by Meakin, presumably referring to jam-makers' perquisites of the raw material of their trade. An apprentice is still, or was until recently, allowed by custom to eat as many dates or raisins as he can stomach. He generally stuffs himself for the first few days, but soon finds that there are discomforts attending on a surfeit and moderates or discontinues the habit. Such is the case, one assumes, in a jam factory. After the distressing stories one hears of pulp and colouring matter used to simulate fruit by commercial jam-makers it is encouraging to read how the numbers of employed as well as their diet were directly dependent on the fact that genuine fresh-picked fruit was used in this particular factory.

'Food brought from home,' concludes Meakin, still writing of Messrs. Hartleys, 'principally here as elsewhere, on Mondays—is heated free.'

This heating of food is interesting. It appears to have largely died out nowadays. A number of firms, however, are mentioned about this time as providing re-heating facilities, and Cadburys had a 'unique' system, as we have seen, of which Meakin provides an illustration, of small ovens let into the wall, in which portions of food could be heated by steam. To-day most operatives prefer either to get their meals at home or at restaurants or cookshops where it is possible, or else to bring sandwiches or buy snacks or hot meals from the factory or works' canteen. In the heavy industries, comparatively primitive methods still prevail and the men not only boil up quantities of tea, which is very necessary to replace the moisture they lose in work, on braziers, but also heat up food or cook sausages, etc. themselves. The problem of feeding operatives in the heavy industries is one that needs a great deal of consideration however, and will consequently be dealt with later.

Writing of Messrs. Rowntrees of York, Meakin states that they 'have two dining rooms, seating respectively 750 and 500, and a third for their men, seating 500 (more of the latter living near or cycling home to dinner) besides separate rooms for overlookers or clerks. Men over eighteen have the use of the

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smoking-room. Pictures, flowers and hanging plants make the rooms bright, and the following tariff is in force: vegetable or lentil soup, 1d.; Irish stew or pastry, 1d. or 2d.; sausage and potato, 1d.; meat puddings, 2d.; milk or Yorkshire pudding, 1d.; peas, etc., $\frac{1}{2}$ d. The usual provision for heating food is made, each employee having a dining-room check to attach to the dish or bowl left, so that the attendants may put it at the right place in time for dinner, while the girls' tables are provided with boiling water taps, etc. for tea.'

Among the large number of other firms mentioned in Meakin's book are Messrs. J. & J. Colman, mustard manufacturers of Norwich, who were amongst the pioneers in English Industrial Catering. This firm have 'several simple dining-rooms', writes Meakin, 'hung with pictures' which 'are allotted to the various departments of the famous Carrow Works, which in many ways display the kind thought of the proprietors for their employees. An excellent kitchen is maintained, from which meals at 2d. to 4d. per dish can be either served in the rooms or sent out in double tins, the outer compartment of which is filled with hot water. A most ingenious form of menu is adopted, namely a glass showcase hanging on the wall by the factory gate, that all may inspect it, wherein are displayed, each day, as in a "cook-shop" window, priced specimens of the viands to be obtained. So practical an advertisement must decide many where to dine, especially as the prices run: Four ounces of roast meat, dumpling and vegetables, 4d.; slice of salt beef, fried fish, or stew with dumpling, 2d.; slice of cold beef, beef patty, pint of soup, puddings, etc., 1d.; half pints of tea, coffee or cocoa (served at 5.45 and 8.30 a.m., and 1 and 6 p.m.), $\frac{1}{2}$ d.; short-cakes, $\frac{1}{2}$ d.; new milk (at 7.30 a.m. Sundays included) $1\frac{1}{2}$ d. per pint. All purchases have to be made by check, and hot meals must be ordered before 9 a.m. to ensure an adequate supply without waste. Each day there is a special *plat du jour*, so that variety may be combined with economy.'

Presumably, the Sunday milk was for collection by those who lived near, or for special workers, such as stokers, who had to work week-ends. The illustration which Meakin gives of the show-case menu, is certainly novel, though it could

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hardly be adopted in times of strict rationing like the present.

When Meakin wrote, Messrs. James Crosfield & Sons of Warrington, makers of Erasmic soap, were just erecting dining-rooms for 500 men and boys and 200 girls. Their total staff was then 2,000. In addition to dining-rooms the firm was building baths, dressing-rooms, library, and reading-rooms.

Other firms mentioned as having 'commodious' dining-rooms are Messrs. Graves of Sheffield, where food could be got at cost price; Messrs. Selincourt of Pimlico where 450 to 750 women and girls sit down to meat and two vegetables for fourpence, and milk pudding at a penny every day except Monday, when they bring their own food to be warmed up; and Messrs. Adams of Nottingham, where girls bring their own food, as providing meals proved unsuccessful.

Messrs. Brunner, Mond (later to be expanded by Lord Melchett into the Imperial Chemical Industries Ltd.) provided a dining-room with heating apparatus for food and water for 3,000 men at their Alkali Works. No food was provided, however.

Messrs. Huntley and Palmers are described as having three large dining-rooms accommodating about 1,500 at mealtimes when Meakin wrote. A recent visit to this works at Reading disclosed that these dining-rooms were closed down later but reopened at the request of the operatives. Only about a fifth of the numbers mentioned by Meakin, however, now use the dining-rooms, partly owing to the large number of eating shops in the vicinity and partly because a large proportion of employees are able to get home for their midday meal.

Messrs. Burroughs and Wellcome are described as having 'a nicely furnished dining-room' and as supplying 'soup ($\frac{3}{4}$ pint and bread) for $\frac{1}{2}$ d., tea, etc.'. They were proposing it seems, to introduce meals at 3d. consisting of beef puddings, etc.

Further evidence of the habit of bringing food to be heated is given at the North-Eastern Railways works at Gateshead-on-Tyne. 'Two rooms seating 1,100 are fitted with long deal tables nearly two feet wide, each with a division ten inches high running down the centre', writes Meakin, 'so that without rising, or leaning over, no one can see what his *vis-d-vis* has brought

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and all can go home with the comforting hallucination that their neighbours supposed them to fare better than they did.' Surely this is privacy carried to extremes. Such sensitiveness has now died out with various other taboos and superstitions such as those enforcing the segregation of sexes at meals and only allowing 'red-badge' men, of exceptional trustworthiness and integrity to enter workrooms where girls were employed, at Messrs. Cadburys. Nevertheless, unnecessarily fastidious as some of these regulations now seem to us, it must be remembered that before the two European wars threw sexes and classes together, little points loomed large in people's imaginations, particularly where education had not much chance to break down prejudices and ill-founded suspicions. Employers who took the trouble to make special arrangements to provide for such points were really in the vanguard of those who showed consideration and understanding of their employees, and though we may laugh at some of the regulations, we must remember the saying '*autre temps, autres mœurs*' and also have considerable respect for the motives of those who formulated them..

It appears that at this Gateshead railway works the men brought principally steaks, chops, and sausages, and occasionally fish. Fruit was never brought.

The same sort of arrangements, Meakin tells us, were made at the electrical works of Messrs. J. Holmes and Co., of Newcastle, who employed about 450 men and 50 girls. 'Four rooms, close to the works, are set apart for the men, and two on the premises for foremen and girls respectively', writes Meakin, who continues; 'on account of the value of some of the materials used in the works, no workmen are permitted to remain on the premises at mealtimes; nor are lunch baskets or cans allowed, they have to be left at the dining-rooms outside. The converted cottages put to this use represent a capital of £2,000 and an annual expenditure of £250, on which no interest is charged. The chief trouble is to keep the place clean, in spite of scrap pans and the power of the men's committee to exclude anyone who persists in throwing his remnants on the floor.'

Another problem, however, arises in the neighbouring firm of Messrs. R. & J. Wilson, whose 'somewhat unsavoury business',

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Meakin tells us, 'is the curing of rabbit skins'. This firm provided 'modest dining accommodation for their workers, but these being of a low type, it is difficult to induce them to take advantage of it, though credit is given to the end of the week'. Their dinners of meat stew with 'four or five potatoes' or 'meat soup and a lump of pudding' cost only 2d.

Free soup and tea and coffee at noon were provided by the Diamond Match Co. 'in quarters fitted up in the basement'. Meat and two vegetables could be obtained in addition for 3d., or 'pudding, bread and cheese, etc.' for $\frac{1}{2}$ d.

A pleasant photograph shows girl employees of Messrs. Petty and Sons sitting in their 'commodious dining-room . . . over the offices, where a cook is engaged preparing or warming food deposited with her in the morning and where tea is supplied for $\frac{1}{2}$ d.' The girls appear to be provided with cups, saucers, plates and cutlery. Attendants in aprons stand by and there is a piano in the corner of the room and plants on the tables.

Similar provisions for warming and serving food were made by Messrs. Clarke, Nickolls and Coombs, at their 'Clarnico' factory at Hackney, states Meakin, where girls could reserve one of the 700 seats in the extensive dining-room for a weekly payment of 1d. Other firms mentioned as providing similar facilities are Messrs. Chivers at their Histon Jam Factory; Messrs. Huntley and Palmer at Reading; Messrs. Hazell, Watson and Viney; and Messrs. Cassells at their London printing establishments.

Meakin also mentions several Irish firms as supplying dining-rooms and sometimes also food for their workers. These include the Belfast Ropework Co., the Bessbrook Spinning Co., Messrs. Davidson and Co., of Belfast, makers of tea-drying machinery; Messrs. Guinness, the Dublin brewers; and Messrs. Jacob, the biscuit manufacturers.

Samuel Smiles's son was a former managing director of the Belfast Ropework Co. which employed about 3,000 workers. Here are large dining-rooms in which food is provided at prices which cover not only cost but wages, rent of ground and interest on capital invested in building and plant. These prices are: 1d. per portion for Irish stew, potatoes, and gravy, corned beef,

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fish, cheese, porridge and milk, rice and milk, or cocoa; milk or coffee, $\frac{1}{2}$ d. or 1d.; tea, broth or pea soup, $\frac{1}{2}$ d. 'Catering on these lines', comments Meakin, 'could meet with no objections from the most avaricious shareholder.'

At the Bessbrook Mills the girls only earned 7s. to 8s. a week, which according to Meakin was the same rate as 'doffers' in England at the time. Their diet was mainly potatoes of which they could obtain six in the canteen for $\frac{1}{2}$ d., buns were $\frac{1}{2}$ or 1d.; meat broth and rice was $\frac{1}{2}$ d. or 1d.; tea, $\frac{1}{2}$ d. The average weekly expenditure per head on food was only 11d. Free meals were supplied to 'half-timers'—'A miserable shoeless lot'.

Messrs. Davidson and Co. had a comfortable dining-room for 250 to 300 workers. Meals had to be ordered the day before and their prices covered bare cost.

Messrs. Guinness and Son 'provide a large dining-room, at which a staff of cooks and attendants are maintained at their expense, the cost price of the food alone being charged. Workmen on special tasks receive free meals. Draymen starting early get substantial breakfasts free, and those starting at 6 a.m., including the women cleaners, are supplied with roll and tea or coffee free. All messenger boys and boy labourers receive a good meat dinner free.'

'Messrs. Jacob provide one large room for 700 girls, and a smaller one for foremen, clerks, etc., meeting the expenses of the large one by charging for tea, coffee, cocoa, soup, milk, or lemon-squash, $\frac{1}{2}$ d. per half pint; three ounces of meat with vegetables, 2d.; two cuts of bread and butter or jam, or a saucer of peas, $\frac{1}{2}$ d.; rice, blancmange or stewed fruits, 1d. This room is filled three times in succession, while the men and boys are served at the same time from a counter.

'Messrs. James Templeton and Co., Carpet Manufacturers of Glasgow Green, have excellent dining-room accommodation', continues Meakin, 'a few minutes' walk from either of their mills, in the building secured as an institute for their workpeople. This is maintained from a special fund, but the prices charged provide material and wages. The girls obtain roast meat and potatoes for 4d.; stewed or minced meat and potatoes for 2d.; soup and bread, puddings, apple dumplings, etc. for

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1d.; tea, bread and butter or jam for $\frac{1}{2}$ d. The clerks and others dine apart, and are charged: Roast, boiled or stewed or fried meat and potatoes, 6d.; soups, $1\frac{1}{2}$ d.; puddings, etc., 2d.; a special menu being arranged each day for both classes.

'Messrs. J. and P. Coats Ltd. of Paisley', continues Meakin, 'have a dining-hall accommodating 500, with lavatory and sanitary arrangements of the most modern description. Heating apparatus is available for those who bring their own meals, or for 2d. they may obtain, according to the day of the week, mince, pea soup, broth, or fish and potatoes, or potato soup and pudding with bread; half price being charged for half-timers. At breakfast, porridge and milk are supplied at 1d. or $\frac{1}{2}$ d., and tea with bread and butter 1d. to all. Payments are made by ticket.'

In his general summary of conclusions from an extensive study of industrial catering arrangements in Europe, England and the United States, Meakin makes two interesting points which are worth considering. First: some canteens were found to fail because they provided nothing better for the worker than they were used to. 'Those firms', he says, 'which, aware of the ordinary habits of their workers, provide no better, or little better accommodation than their homes do, are usually disappointed at the result.' 'Success is only attainable', continues Meakin, 'when distinct attractions are offered, apart from merely cheap food and warming facilities. The cleanliness at least of the rooms and the utensils must be above that to which the customer is accustomed, and there should be abundance of light, but especially of air. Neatness and order must prevail, and good behaviour made a condition of attendance. If really good food, well cooked, is then served at prices within the reach of the workers, or their own food heated free, the dining-rooms can hardly fail to succeed.'

A common complaint, says Meakin, on the part of employers who had failed to make a success of their canteens was 'our workers are of such a low type, you know, so ignorant'. As Robert Owen showed, however, the employer himself can remedy this by providing educational facilities and decent surroundings which in themselves improve the standard both men-

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tal and physical of employees. Such an excuse in any case is largely out of date to-day, though it is still to be met with in certain industries.

The second point made by Meakin is the importance of letting the workers themselves take responsibility in running their own welfare facilities through canteen committees, welfare councils and so forth. This obviates such unhappy experiences as Meakin describes of Messrs. Pratt, Letchworth and Co. of the Malleable Iron Works, Buffalo, where excellent welfare institutions including dining-rooms, established thirty years previously, had gradually fallen in disuse through the apathy of the workers and their suspicion that their wages would be reduced in proportion to the benefits allowed. Finally things got so bad that tickets given to workers for expeditions were found to be sold or given away to non-members of the firm while only a few actual employees were making use of them. 'The present head of the firm,' however, writes Meakin, 'agreed . . . that perhaps the successive failures were in part due to their having been entirely organized by the firm, instead of throwing the responsibility on the shoulders of those intended to benefit therefrom, as is now done as far as possible by most progressive firms.' To-day, much the same holds good. Though there are still some firms who set their faces rigidly against democratic control of welfare institutions, the majority see in such control a useful safety valve for dissatisfaction and a valuable buffer between management and personnel. The most valuable asset of such a system is, however, the sense of appreciation which is fostered among the workers for services to which they feel that they themselves have contributed and over which they have some measure of jurisdiction. It takes away the stigma of 'charity' which lies very deep and cuts at the roots of the pride and self-respect of the majority of working-class people; it also engenders a better sense of co-operation and good fellowship among themselves as well as a closer personal tie with the management.

Chapter VIII

WAR AND THE INDUSTRIAL CANTEEN

LOOKING BACK

The war of 1914-18 marked a turning point in the history of industrial catering. A new conception was born at this time of the problem of feeding the industrial worker. To see this new conception in proportion it is necessary to look back over the ground we have already covered and recapitulate briefly some of our observations. We have seen that in the Middle Ages the feeding of his employees was looked upon as part of the normal responsibilities of any employer, whether he were the Manorial Lord, the tenant farmer or the master craftsman. In all cases the employees 'lived on' the lord or the master and often 'lived in' as well. The employee was part of his employer's normal household. With the first signs of the factory system, as exemplified by Jack of Newbury—famous John Winchcombe the kersey maker—the old idea was taken on naturally and John Winchcombe is described as providing oxen and other provender for his workers' fare and no doubt he had excellent cooks to make the best of the material supplied so lavishly. The tradition of providing wholesome and well-cooked meals for workers and apprentices went right through the Middle Ages as is shown by the guild ordinances establishing certain standards of feeding and we may well imagine that the master who provided the best fare was able to obtain the best and most loyal service, particularly in the transition period when the old limitations were breaking down and competition

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in the labour market was increasing. With the emergence of such large-scale manufacturers as Jack of Newbury, there was no doubt also some competition to obtain skilled caterers to deal with such numbers of hungry workers and the mass feeding of the Middle Ages was no doubt revived in the mass factory feeding of the new industrial era. Industrial feeding, at this time then, was not so much a new thing as an old thing which had been revived to fulfil a new need and function. It was part of the medieval tradition in its recognition of the responsibility of the master for the welfare and comfort of his workman. It was part of the robust and benevolent spirit which gave its name to 'Merrie England'.

But another spirit was growing up beside it—a spirit of narrow puritanism and money-grubbing application to business. The old tradition was dying—the bountiful tradition of our forefathers. A new doctrine of narrow individualism was taking its place. 'Each man for himself and Devil take the hindmost,' was its motto.

Men of expansive vision and imaginative enterprise were driven abroad now to seek for new outlets for their energy and so we got the merchant adventurers and the great explorations of the New World. Industry lost its expansive organic character that we find in the activities of the Paycokes of Coggeshall, the Springs of Lavenham and the other great wool families. It became concentrated in small homes and hovels exploited by a band of ruthless masters who let out raw wool and later cotton for combing and carding, spinning, weaving, fulling and dyeing and paid starvation rates for the finished products. The domestic system was in full swing during the seventeenth and eighteenth centuries, and the domestic system entailed no responsibilities on the part of the 'master', who was really by now only a glorified middleman, towards his workmen. Small groups of workers, particularly in the West, worked together under small masters, but the medieval spirit was dead now in these small workshops and each man had to fend for himself. There was a good deal of discontent in these small shops as we have already seen. The sense of responsibility had died and with it the sense of 'good cheer', of happy, social life within the community. England

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became a land of derelict villages and decaying towns. Churches were ruinous and half empty. Cheap spirits began to take the place of beer as the drink of the people. The poor ceased to be part of the organic community and sank to the level of beasts of burden subsisting, or struggling to subsist, on starvation wages. Fortunately, a few employers preserved some sense of public spirit, enterprise and responsibility. Such a man was Ambrose Crowley, the Durham ironmaster, but it was left to Robert Owen and a few pioneers of the Industrial Revolution to revive the spirit of responsibility of master to worker which had existed with such healthy results in the Middle Ages. Nevertheless, progress was slow throughout the nineteenth century. Pioneer firms such as Cadbury's, Lever's and others which have been mentioned, stand out as shining examples, but also as exceptions, to the general trend of rigid commercialism and lack of foresight and social responsibility. So it continued until 1914. In the Report on Factories and Workshops for 1918, the Chief Inspector of Factories stated that before the first World War started there were barely a hundred regular factory canteens, whereas before the end of 1918 there were probably well on to a thousand working or in process of building, while no important munition factory was without a canteen.

NEW DEVELOPMENTS

The impetus given by the war of 1914 to the increase of industrial canteens was not so much a revival of the medieval responsibility as a new recognition of the need of the worker for adequate nourishment. It was realized that, even taking the lowest view of the worker, either male or female, as that of a machine or an animal from which a certain amount of output was required, it was impossible to obtain this output unless the requisite amount of fuel was first supplied. Before the war, Mr. Seebohm Rowntree, later to be made director of the Welfare Department of the Ministry of Munitions, had conducted some extensive researches into the living conditions of the poor in York and other industrial towns. The results of his researches showed conclusively that the working classes were not getting enough to eat—enough that is to maintain their efficiency as

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workers, or to ensure healthy growth of children to become useful citizens. In fact widespread undernourishment was proved sufficient to impair the efficiency of the industrial machine.

This fact was taken notice of early in the war and experts were called in to advise. Various committees were set up and various recommendations were put forward. The most important of these committees was the Health of the Munition Workers' Committee set up in 1916 and the Canteen Committee of the Central Control Board (Liquor Traffic) which was set up in 1915. Both committees were under the chairmanship of Sir George Newman. The first-named committee published a final report in the intervening years. Section IX of this report is devoted to 'Food and Canteens' and gives an accurate picture of the growth of industrial canteens during the war, it however rightly attributes the greater share of credit for the promotion of these canteens to the Canteen Committee of the Central Control Board (Liquor Traffic) which did important pioneer work in this field.

ALCOHOL AND NOURISHMENT

The connection of factory canteens with alcoholism resulted from the fact that medical investigation found that the craving for alcohol was due in a large measure to an inadequate supply of food values to the bodily system, for which alcohol provided a partial compensation. Where proper facilities were set up for obtaining adequate nutrition, alcoholism greatly declined. Sir George Newman's canteen committee therefore did all it could to encourage the establishment of industrial canteens. In the words of the final report of the Health of Munition Workers Committee . . . 'the burden of work in connection with the establishment of industrial canteens has fallen upon the canteen committee of the Liquor Control Board assisted by His Majesty's Office of Works, who have thus facilitated the supply of proper and sufficient nourishment for the munition worker not only in the interests of sobriety, but also in the interests of industrial efficiency. . . . Eventually it became necessary, owing to the magnitude of the undertaking, that the State should shoulder increasing responsibilities in the matter. The Munitions

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of War Act, 1915, provided that 'controlled' employers, in which category were included practically all manufacturers of munitions, were to receive only their standard pre-war profits plus one fifth, the remainder being paid to the Exchequer. On the invitation of the Liquor Control Board it was decided that the cost of the establishment of canteens should be borne from funds which would otherwise accrue to the Exchequer. At the same time the Minister gave instructions for the provision, where necessary, at all Government Munition establishments (Royal Arsenal National Factories, etc.) of adequate canteen accommodation at the expense of the State, and entrusted the Board with the general responsibility for the organization of canteens at these establishments.

'The Liquor Control Board have thus been the responsible authority', continues the report, 'for the organization of industrial canteens in munition works throughout the country. . . . The Board have made it their study to do all that was possible to assist employers in design, equipment, and management of canteens.'

The policy of the Board was: 'First to encourage the employer or owner to make suitable provision for canteen accommodation where necessary; secondly, to facilitate such provision by voluntary or other agencies; or thirdly, to establish a canteen themselves either managing directly or handing over the management to a properly constituted committee of employers and workmen.'

As a consequence of this policy with which the Health of the Munition Workers' Committee was in full agreement, the Report states that 'at the end of 1917 some 840 industrial canteens had been established in National and Controlled Munition Factories and at docks concerned in transport in connection with the war'. The approximate cost of these canteens is given as 'upwards of 1½ millions'.

Summing up, the Report states: 'Speaking generally, the Committee are glad to recognize that the Liquor Control Board have initiated, guided or assisted, a social and industrial reform, which force of circumstances has rendered imperative in the present emergency, and which has, the Committees are satisfied.

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contributed substantially to the successful output of munitions. The industrial canteen has, in fact, proved itself one of the most effective instruments in securing and maintaining a high standard of industrial work. It has contributed to increased sobriety, it has reduced industrial drinking, it has served as a counter attraction to the public house, it has supplied improved nutrition to the worker which has led to a reduction in sickness and to increased energy, better timekeeping and improved output. The Committee earnestly trust that these substantial gains may be maintained in the future and that the industrial canteen will become a permanent and essential factor of the modern factory.'

In the report of the Chief Inspector of Factories for 1918 we are further told that: 'The Central Control Board (Liquor Traffic) appointed in June 1915, was the Government authority set up by an order in Council under the Defence of the Realm Consolidation Act, 1914, for the purpose of increasing directly or indirectly the efficiency of labour in any specified areas. They had powers given them not only as regards establishment and maintenance by themselves or through agents of refreshment rooms, but also to acquire compulsorily any premises or interest therein, to provide or authorize provision of entertainment or recreation, arrange for postal and banking facilities and to appoint their own inspectors under the Factories and Trade Boards Act. In co-operation with the Factory Department and the Committees above described, as well as with the Welfare Department later set up by the Ministry of Munitions, these powers were with immense gain to industrial workers (munitions and others) exercised by the Canteen Committee of the Central Control Board and carried further by the food section of the Ministry of Munitions. The Canteen movement with very important aid from the Y.M.C.A., Y.W.C.A., Church Army and other voluntary organizations has extended enormously during the war.' The Report states in conclusion: 'The great work accomplished by the labours of the Canteen Department of the Central Board (Liquor Traffic) in controlled munition factories and later by the food section of the Ministry of Munitions . . . not only was probably the most decisive factor in en-

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abling the munition workers to sustain the fatigue of their intense toil, but it has effected a changed outlook throughout industry on this question of arrangements for meals on or near factory premises, and in many cases with improved dietaries for workers.'

Meanwhile, the Government had brought in legislation making it compulsory for all factories engaged in producing munitions of war to provide canteens for their employees. The resulting effect of this growth in canteens is summed up by Drs. Collis and Greenwood, the authors of *The Health of the Industrial Worker* which appeared in 1921, who compute that by 1918 one million meals were served daily in industrial canteens.

REPORTS OF FACTORY INSPECTORS

Having given a general outline of the development of industrial canteens during these war years we are now in a position to examine this period in greater detail. The best and most comprehensive picture can probably be obtained from a study of the factory inspectors' reports of these years.

Here, first of all, it is necessary to make a clear distinction between messrooms, where operatives may bring their own food to be eaten or warmed up for consumption and where possibly a cup of tea may be provided, and restaurants, dining-rooms or canteens, where hot food or snacks are provided by the firm either at cost price or less than cost.

For some time, it had been noted by factory inspectors that an increasing number of firms were providing messrooms for their workers. At the beginning of the century legislation had been introduced by Parliament forbidding the eating of food in factories and workrooms where the material used in industrial processes might poison or contaminate the food. The result was that those workers who could not get home or afford to go to restaurants or teashops were forced to eat their food in some yard or even in the street. Instances are recorded of factory inspectors being told by employers that the only alternative to breaking the law is to turn out their operatives into the street and that if they object, or it is raining, they only have the law to thank for it. Thus, attempts to protect workers from food

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poisoning too often resulted in them enduring discomfort or even serious risk to their health. Some workers found sheds or outhouses in which to eat their meals. A few enterprising employers provided eating rooms; others, more enterprising still, provided restaurants where cheap meals could be obtained. It was, however, a long time before more than a handful of really progressive employers, such as those already mentioned, came to realize that greater efficiency on the part of the operative could be obtained by ensuring that he or she got proper nourishment, and that often meals brought were highly inadequate for providing sufficient nourishment for full efficiency. In some places dining clubs were started either by the workers themselves, or by groups of employers for their benefit. In 1911 the chief inspector of factories had reported: 'The provision of messrooms, cloakrooms and other arrangements for the welfare of the workers is gradually increasing, though they are not required by law in any but certain dangerous trades. . . . The increase in Birmingham is partly due to the excellent example set by Messrs. Cadbury of Bournville, who for many years have made special provisions for the comfort and well-being of their workpeople. In many small works some place is set aside for messroom and similar accommodation. There are, however, very many factories where every inch of room is taken up by the process carried on, and the workers have to take meals at the benches or go outside during mealtimes. . . . The cost of food and accommodation when purchased outside is a severe tax on the slender earnings of these workpeople. The difficulty has been met in the jewellery quarter of Birmingham to a certain extent by the recent commencement of a Workers' Club, which has been capitalized by some public-spirited manufacturers. This club provides meals at extraordinarily low cost, and has excellent recreation rooms. Being in the centre of the factory area it has proved a great boon to the workers in the jewellery quarter.'

In 1912 we find a dining-club mentioned where membership cost the worker 1d. a week and where good food was provided at 2d. or 3d. a meal. Adjoining the club was a large chapel where periodicals could be read and short concerts were

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arranged. At Hinckley in Leicestershire a number of manufacturers are described as having jointly rented a room which had formerly been the town hall and where operatives could eat their food at open fires and boiling water was provided for tea.

In 1913, however, we find the first indication of the new attitude to industrial feeding in the word of the Chief Inspector of Factories who states that 'it is gradually being realized that the physical fitness of the worker has an important bearing on the output of the factory, and it is found that dining-rooms and restaurants are slowly becoming more general, more especially in the modern and most up-to-date factories'. The Chief Inspector goes on to cite the experience of a Bristol firm as being 'most instructive' on this point. This firm, according to the report, has 'no less than five restaurants in one group of factories, each large enough to accommodate 1,000 people, and the meals are provided by the employers at cost price or slightly below it. The first restaurant was started five years ago (1907) for one department only, and it was observed that a gradual reduction in the sickness rate in that department followed, until eventually it fell to one half the amount experienced previously, when the bulk of the workers had not the opportunity of obtaining a good mid-day meal. Similar results were experienced when the restaurants were extended to other departments.'

Another firm is mentioned 'employing 500 to 600 men, whose works are situated some distance from Dundee' which provides 'a messroom and meals—breakfast, dinner and tea. About 180 men take advantage of them. Breakfast consists of porridge and milk 1½d., tea ½d. per large cup, roll and margarine ½d., eggs at current prices. A three-course dinner can be had for 4½d., Scotch broth ½d. per bowl, stew, potatoes 3d. per plate (without potatoes 2d.), mince and potatoes 3d., bridies (meat pies) 3d., rice pudding 1d., plum pudding 1½d.'

The importance which the subject had gained by 1916 is shown by an extract from *The Times* of September 20th of that year which state: 'The provision of proper meals for the workers is, indeed, an indispensable condition for the maintenance

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of output on which our fighting forces depend, not only for victory but for their very lives.'

In October 1916 the Canteen Committee of the Central Control Board (Liquor Traffic) produced a booklet entitled *Feeding the Munition Worker*, in which the Committee stated: 'There is now an overwhelming body of evidence and experience which proves that productive output in regard to quality, amount and speed is largely dependent upon the physical efficiency and health of the worker. In its turn such physical fitness is dependent upon nutrition, the purpose of which is to secure the proper development, growth and energy of the human body.

'The human body calls for a constant supply of food, first for its growth, for the building up of its tissues and for repair, and secondly, as fuel for the production of heat and energy. Both requirements are indispensable and absolutely necessary. You cannot get health, work and a reasonable output apart from good nourishing food, with increase in work there must be proportionate increases in quantity and in nutritive value of the food eaten.

'What is the necessary diet for the worker? Broadly the answer is a dietary containing:

'A sufficient quantity of nutritive material in proper proportions.

'Suitably mixed.

'Easily digestible.

'Appetizing and attractive.

'Obtainable at low cost.

'Where this sort of dietary is not being procured by the workers, health and output are being imperilled. Failure to obtain it may be due to many causes: ignorance, carelessness, insufficient wages, no facilities, distance from home, poorness of carried food, night work and so on.'

In 1916, Miss Dorothea Proud, Spence Scholar in Sociology at Adelaide University, published a book on Industrial Welfare, which was the result of several years' intensive research on the subject as well as practical experience in Welfare work in the British Ministry of Munitions Welfare Department. Miss Proud has many interesting observations to make on the subject of

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works' canteens and industrial feeding as a whole, and gives an admirable survey of the stage of development reached in industrial feeding at this time. In her book, Miss Proud devotes one section to the consideration of messrooms and dining-rooms and another to food, as it affects the worker. We quote extensively from both sections. After discussing the provision of cloakrooms for workers, Miss Proud continues: 'Perhaps of greater importance than the provision of cloakrooms is that of dining-rooms. In some cases it is dangerous for the workers to partake of food in workrooms, and it can never be considered desirable. Yet many workers prefer to have their meals on the premises, for often there is no convenient place in the neighbourhood and, on wet days, especially, the streets do not present an inviting prospect. This fact does not escape the notice of employers, and in 1912, the Principal Lady Inspector could say "many employers and an increasing number are on their own initiative making provision of good messrooms. . . . This, in itself, tends to spread desire among workers for so important an aid to health in other places."' ¹ According to the Factory Inspector's Report for 1913. 'The admirable examples set in a small minority of cases by employers have . . . told in bringing the question (of messrooms) forward and . . . many employers are readier to consider the matter when extending their undertakings than they ever were before, and are thus ready for any amendment of the law in this matter. While the cases even now to be found, where perfectly cooked food from a well-planned and liberal dietary is supplied at cost prices in a good dining-room, will probably always remain exceptional, there seems no reason to despair of seeing in the future everywhere a reasonable provision of cleanly, properly cared for, and suitable rest rooms where workers can eat and quietly consume the food they bring with them.'²

'But there are difficulties which must be faced. Even where messrooms are demanded by law and provided by employers, they are not always used. This is attributed not "to any stubbornness on the part of the men, but to a sensitiveness in exposing their frugal meal to the face of their more fortunate

¹ Factory Report, 1912, p. 126.

² Factory Report, 1913, p. 81.

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fellow workers".¹ They prefer to eat their food in secret even at the risk of lead poisoning. This very real difficulty cannot be overcome by supplying differently priced food, for the man who can only spare 4d. per day is still contrasted with the man who spends 6d. To make meals part of wages or to make compulsory deductions from wages for food is illegal, and the attendant dangers are too great to be overlooked. Even with the "written consent" of the workers the uniform deduction is unsatisfactory.

Speaking of messrooms in the Northern Division, a factory inspector divides them into two groups: (1) those to which workers can bring their own food and, (2) restaurants. The former are often not satisfactory. The accommodation provided is frequently found to be unattractive, and the rooms bare, ill-kept, and comfortless. In the restaurants the arrangements are usually much superior and the food is supplied at a wonderfully cheap rate.² Dining-rooms are to be found in great numbers and almost endless variety, though a likeness is noticeable between the dining-rooms of widely separated factories, belonging to the same employer and also between those of neighbouring firms. Both good and bad examples are followed. The most homelike dining-rooms seen were repeated on a larger scale in another of the same firm's factories and a most cumbersome method of bookkeeping is to be found in use by another in the same town.

In its first stage the dining-room of a factory is merely a place—possibly a part of a workroom partially partitioned off. In one quite unpretentious factory such a place was described as "the dining-room" and then came an explanatory addition—"where the girls take their hats off". Such a dining-room does not inspire much enthusiasm, and when the hands are expected to keep it tidy they often dodge the duty or avoid the use of the place altogether as far as possible. A large, unlovely, comfortless shed used as a dining-room in one factory was described by the matron as hopeless; even her suggestions, labelled large on obtrusive posts, to the effect that the girls were expected to behave there "as at home" were powerless to prevent disorder. The fact that the place was not like their homes seemed to have

¹ *Ibid.*, p. 48.

² *Ibid.*, p. 8.

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escaped her notice. To take the girls from homes, where, by dint of much labour, only partial success can be obtained, to put them in a dining-room which nothing could make attractive, and to ask them to keep it in perfect order is to court failure. There is the difference between hope and despair in the behaviour of girls in a well-appointed dining-room and the behaviour of the same girls in a shed. The girls who romped in the latter, who tossed food about, who threw paper on the floor, and used utensils in ways in which they were never intended, became by mere transference to a fine messroom, orderly and decorous. The messroom was not perfect, and the attendance was limited (the girls washed their own cups, etc.), but the matron said she had had no cause of complaint about these very girls whom before she had considered hopeless. . . . There seems to be ample evidence that manners depend very largely on environment. . . . In the dining-rooms provided by Co-operatives largely in the control of the employees who use them, the standard is commonly higher than in those of private companies, though it never rises to that of the best dining-room to be found in factories.

‘In its second stage the dining-room of a factory has some arrangements for warming food and making tea—a gas ring and kettle, perhaps in the most primitive case. A few of the hands may be told off to prepare the room for the others some minutes before the dinner-hour, and for such services may be paid a time rate if pieceworkers, or may receive a special bonus at stated intervals.

‘The next stage may be considered that in which someone is employed solely to look after the dining arrangements, but there are many ways in which this is done. The simplest is nothing more than a delegation to one person of the duties performed by the girls themselves in earlier stages—“hotting up” the food brought, boiling kettles, “making tea”, clearing up papers and scraps and so on. In addition to a small payment for such services some employers permit the attendant to sell food for profit. . . . An advance is made when the welfare department itself controls the supplies with a view to providing food. The ways in which this is done and the degrees of success with

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which it meets are various, and they depend very largely upon the individual in charge of the department as well as the aims of the employers.

‘The tables and seats in factory dining-rooms are of many kinds. Attempts have been made to use movable tables—tables whose tops can be swung so as to serve as backs of seats when the room is used for entertainments, or tables which can be packed away when the room is wanted for dancing or for games. It is noticeable that where the workers have most voice in the management of the messroom (for example in Co-operative dining-rooms) there tend to be more comfortable seats (chairs in place of forms, for example) and also more homelike tables, with cloths in place of smooth washable tops—indeed, tablecloths are only possible when the workers take a decided interest in keeping them clean and in decent condition. In one or two factories may be found red and green cloths, and vases of flowers on the tables when they are not in use for meals. Such rooms are made very attractive and can be quite free from any suggestions of toil.

‘In one case the factory dining-room somewhat resembles a picture gallery, the walls of the large room being hung with part of a director’s collection of paintings. It is noteworthy that the better the room the fewer the complaints as to the behaviour of the employees. In some dining-rooms the girls are waited on by a staff of waitresses, but the advantages of this are dubious. The provision of books in places of ready access appears to be greatly appreciated. . . . The final step in the development of the factory dining-room may be considered that in which it is used as a domestic training school for the factory girls. This stage is not completed in any factory but several show indications of movement in this direction. . . .

‘The cost of the rooms themselves is rarely, if ever, covered by payments from the workers, and dining-room charges (apart from the payments for food) are rather the exception than the rule, and are usually found in the less elaborate attempts.

‘Workers are sometimes asked to pay a penny per week for the use of the room and hot water. In some cases the messrooms and rest rooms are run somewhat on club lines, and only mem-

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bers are allowed to use them. . . . The subscriptions are necessarily very low—a shilling per quarter perhaps—and vary with the standing of the employee, and the class of accommodation to which he or she is entitled.

‘In contrast with factory dining-rooms and in no way to be considered as welfare work, are the dining-rooms sometimes provided by people desiring to assist the workers. To judge by the numbers who use them they are welcome, but they tend to relieve the employer of the responsibility for his workers of which welfare work is the expression.

‘The standard of messrooms varies almost infinitely; but all those provided voluntarily by employers may be regarded as experiments towards improving working conditions.’

FOOD FOR WOMEN WORKERS

On the question of providing food for women and girls, Miss Proud has much to say which is valuable. She writes:

‘The question of the provision of food for factory workers is of special importance in the case of women and girls. Girls are notoriously careless about their meals, and moreover, their wages are lower than men’s and they can afford less for food. There may be something, too, in the fact that families tend to reside near the work of the main breadwinner, so their homes are more readily accessible to men than girls. Possibly, moreover, men are more apt to suspect patronage. Employers sometimes hesitate to supply dining-rooms for men, for reasons not directly connected with their works. For example, one employer stated that dining-rooms for his men would mean that those dependent upon them got worse food, as the only person in the family with whose food one must not tamper is the father. Nevertheless, there are many dining-rooms for men, and in many cases one kitchen supplies meals for both men and women, generally in different rooms, often at different times. Prices are usually somewhat higher for men, and the helpings larger, though sometimes the only adjustment is made by the worker’s selection from the menu. The food is, of course, purchased at wholesale rates by the managers of the larger dining-rooms, and this can make a considerable difference in the cost

Food for Women Workers

of meals. However, the advantage is almost counter-balanced by the uncertainty as to numbers. Herein lies the chief difficulty: how to reconcile free choice on the part of the workers from day to day with certainty on the part of the manager as to what will be needed. The larger the number the more accurately can the demand be gauged, and experience brings with a knowledge of daily seasonal fluctuations, so that by an efficient manager waste can be almost eliminated without limiting the choice of dishes.

‘The winter months are generally those in which factory dining-rooms are most appreciated, presumably on account of the weather. But in each week there are fluctuations in numbers. The opening of a good fish and chip shop in the neighbourhood, for example, may decrease the numbers on Fridays more than on other days. As a rule, however, Monday is the “small day” as many workers bring from their homes what was left from Sunday’s dinner. The numbers generally tend to increase towards Thursday, but no hard and fast rule can be laid down.

‘In connection with a small dining-room established by ladies some twenty-six years ago, in the neighbourhood of several factories the numbers varied from 70 to 200 on ordinary days, and from none to a hundred on Saturdays. To cope with such fluctuations is impossible if hot joints are to be prepared and prices to be low. To gain some idea of the expenditure we may look at the yearly expenses of this little dining-room (A) and the quarterly balance sheet of a factory dining-room (B) where on the average about 110 dinners were purchased daily.

(A) 1913

	£
Food for a year cost about	357
Rates and Taxes	71
Lighting and heating	69
Wages	120
Rent	13
Utensils and repairs	19
Laundry	14
	—
	663
	—

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'In the first case (A) no attempt was made to do more than cover the cost of food, as the dining-room was run on philanthropic lines. In the second (B) the balance sheet (in greater detail) was submitted to a committee of employees which nominally controlled the dining-room. Rent, rates, and taxes, lighting, fuel, laundry and part of the wages were left to be paid by the employer. The dining-room cannot be considered one of the most efficiently managed, nor must the amateur nature of its management be attributed entirely to committee of employees. In a neighbouring county, another factory dining-room (C) also nominally controlled by a committee of employees, was found to be charging only from one half to one quarter of the prices charged here (B) for dishes similar in quantity and quality.' Miss Proud gives a comparative list of charges in a footnote which may be quoted as giving a good idea of canteen charges at this time:

		(B) 1913	
<i>Expenses</i>		<i>Income</i>	
	£		£
Flour, sugar, etc.	59	Meals paid for by	
Small groceries	30	employers	254
Butter and tea	38	Meals for staff, visi-	
Butcher's meat	38	tors, students and	
Vegetables and fruit	20	Committee and	
Fish, eggs, etc.	13	works tea	35
Cake	11		
Milk	21		
	<hr/>		<hr/>
	230		289
	<hr/>		<hr/>
Portion of wages paid			
by Institute	48		
Depreciation	4		
Balance	7		
	<hr/>		
	289		
	<hr/>		

Food for Women Workers

Charges for Women and Girls

	B	C
Chop and mashed potatoes	6d.	—
Roast beef, mashed potatoes and vegetables	4d.	2d.
Steak pie and potatoes	4d.	1½d.
Liver, onions and potatoes	3d.	1d.
Tripe and onions	3d.	1d.
Fish, parsley sauce and potatoes	3d.	—
Fish pie	—	1d.
Shepherd's pie	2d.	½d.
Puddings	1d.	½d.

'The fact that the former factory (C) caters for girls only cannot explain the discrepancy,' continues Miss Proud, 'for men receive larger portions and pay proportionally more (in B); but the fact that the employees' committee in the second case consists entirely of women may be of importance in this connection. The men may be the more anxious to pay their own way, the women may be better managers. As far as can be judged the difference in cost appears to be largely due to management, not that either is badly managed, but there is in one case a tendency to persist in old methods even when they are proved unsatisfactory. It appears that at this canteen office expenses were "needlessly heavy".

'An expert at the head of a catering department, or at least one who intends to become an expert is essential to the successful provision of cheap, good, varying meals,' continues Miss Proud. 'This seems repeatedly overlooked. One finds for example a young typist, without an idea about the subject, flung into the position of the manager of a huge dining-hall. The marvel is not that things run in a haphazard way, but that they run at all. Where an expert has been given control of this department, the results seem to justify the action. A factory dining-room, managed by one who had previously catered for the requirements of an hotel, covered all expenses except the manager's salary and rent. The meals provided were cheap and good, and the menus varied, the numbers increased and became more regular.'

Miss Proud quotes Miss Whitworth as stating in the Factory Inspector's Report of 1913 that 'none of the firms visited have

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endeavoured to make the messroom self-supporting; most are satisfied if the cost of food is covered, but one or two make charges just high enough to cover the wages of the kitchen staff as well'. One firm, notes Miss Proud, employing 6,000 to 7,000 workers reported a loss of about £700 per annum on its dining-rooms.

The average factory menu, as given by Miss Proud, was:

Soup	1d.
Meat and two vegetables	3d.
Made-up dish	1½d.
Pudding	1d.
Tea	½d.

In an appendix to her book Miss Proud gives a number of menus of this period taken from a particular factory. Soup at ½d. varies between 'Haricot Bean Soup', 'Spring Soup', 'Kidney', 'Tomato', 'Lentil', 'Vermicelli', 'Scotch Broth', 'Green Pea', and 'Potato'. For second course on various days the worker can procure 'Baked cod and prawn sauce', 'Salt Brisket', 'Liver and onions', 'Sausage and Green Peas', 'Stewed Steak', and 'Savoury Balls', 'Boiled Mutton and onion sauce', 'Minced Steak and Cabbage', 'Haricot Mutton', 'Steak and Kidney Pie', 'Irish Stew', 'Stuffed Veal', cost 2½d. and 'Roast Mutton' 3d. Tart or pudding is generally 1d., stewed fruit is ½d., milk puddings are ½d.

According to Miss Proud 'soup is not generally taken, except when it is substituted for meat. Scotch broth proved very popular in one factory, where dinner frequently consisted of a penny bowl of broth and a penny pudding. In some factories soup is given gratis, the idea being to train the workers to appreciate it: but the success of the experiment is doubtful. "Nothing for a 3d. dinner is so popular as Roast Beef", was the report from one factory, where meat, potatoes, and vegetables were sold for 3d.; but it was added that the girls seldom spent more than 2d. each, so presumably it was among the men that the beef was so popular! Weekly tickets for 1s. 6d. providing six breakfasts and five dinners are sold in one factory. The tickets must be purchased on Saturday for the next week; thus it is hoped to ensure the worker's good food for the coming week.

Food for Women Workers

Incidentally it would decrease fluctuations in the catering but the scheme does not appear to be very popular.'

The importance of a varying menu can scarcely be realized by the many caterers who repeat the same series week after week. The lively curiosity of the girls in one factory was raised by the manager who varied the menu seemingly *ad infinitum*. There is always some risk in introducing a new dish, but once the confidence of the diners has been won they assail new dishes with alacrity; and a distinct influence can be exercised over their choice of food. The caterer in one factory remarked that a fixed menu is a needless expense. She bought according to the market, not according to a preconceived plan, and no waste was permitted in her department. A debit balance on the year's working, however, is not a proof that the dining-room is economically unprofitable to the proprietors. The return expected is in the greater efficiency of the workers. Nevertheless, Miss Proud believes that many workers, if they considered that the food was supplied at a loss, would feel themselves objects of 'charity' and be aggrieved. She suggests that food should not cost less than the workers customarily pay, nor look more in quantity; it should only be the quality which is better, and this would be less noticeable. 'If the finances of the dining-rooms were entrusted to a committee of workers, it might be that prices would be higher,' says Miss Proud, who continues, 'but it is really not quite justifiable to entrust the finances to them without allowing them some voice in the management, and it is the undisputed control of the management which many of the employers want even at the cost of several hundred pounds a year. By that means they hope to exercise a beneficial influence over the dietary of their employees; and for this they are willing to pay. It is, in effect, paying more than the nominal wages, while securing a certain amount of control over their expenditure. The immediate effects on the employees are undoubtedly beneficial, as physical health and strength is the first object of the employers. But it should be carefully considered from the worker's point of view whether what is wages should not be recognized as such.'

Miss Proud goes on to discuss the 'various methods of deduct-

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ing from nominal wages for food supplied,' and continues, 'these sometimes involve employers in breaches of the Truck Acts, deductions for victuals must not be made without the written consent of the worker, and must not exceed the true value of the goods supplied.'¹ The legal pitfalls are fewer in cases where the full wages are paid in coin, and workers buy from the factory dining-room what they desire, and this certainly saves much labour in bookkeeping and is the usual practice. To what extent food supplied gratis becomes part of wages in the eyes of the law does not yet appear. Beer supplied to workers in laundries was considered part of wages, cocoa or ginger-beer subsequently substituted was still part of the wages; and when it was no longer provided gratis, an addition had to be made to the money wages.² Milk is frequently supplied gratis in factories to some of the workers, and tea is sometimes taken round to all the hands during the afternoon. In one case tea (hot or cold) is provided free, as the manager thinks drinking cold water during hot weather is injurious to health, and so forbids it. Three hundred pounds per annum is spent by one firm on milk to be given to young employees, and in another case a late director's bequest supplies free tea with dinner.

'In some smaller firms,' continues this writer, 'the catering is handed over to an outsider, the dining-room becomes a rent-free restaurant or even a subsidized restaurant. The employer's real object is, as a rule, to induce the workers to eat good food, and the only way of doing so apparently is to put good food in places easy of access, at the same price as that for which inferior food can be obtained elsewhere. Most employers seem quite satisfied with the results.'

Discussing workers' control once more, Miss Proud says: 'To give the workers control of a dining-room, may be to defeat the end for which it was established—namely, to raise the standard of their meals—yet upon their co-operation the success of the venture must needs depend. A share in the management of the dining-room is sometimes given, to the workers themselves through a committee, generally elected from the various depart-

¹ 1 and 2, William IV. c. 37s, 23.

² See Factory Inspector's Report for 1913, p. 105.

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ments. A monthly meeting may be held to discuss their likes and dislikes with regard to the menus, the methods of serving, costs and nutriment, and various details. Frequently very good suggestions are made by the workers, and they gain some knowledge of the difficulties which have to be overcome, and a touch of dignity through responsibility.

'In one case girls meet weekly and select menus for the coming week. In one or two cases they are allowed to take a turn in the kitchen for a month at a time, but this privilege is not greatly appreciated, and cannot be forced. Its success or failure depends upon the personalities concerned. In one factory the manager said the girls about to be married seemed inclined to take advantage of the opportunity of learning how to prepare food. The fact that appliances in a factory are usually incomparably superior to those found in ordinary working-class homes detracts from the value of the experience gained.

'The finances of the dining-room are rarely submitted to the workers, and perhaps never in their entirety. In one case, where all accounts pass through the ordinary clerk's hands, the caterer says she dare not purchase margarine or any stores which are not considered first class as complaints would arise instantly, even though there were no perceptible difference in the food provided. It is probably much more troublesome to permit the workers any share of control than to run the dining-room automatically, but in those cases in which the former method has been attempted the results seem to warrant the extra trouble involved.'

Coming to the question of canteen organization, Miss Proud continues: 'It is no easy task to supply several hundred hot dinners within a few minutes, and the dining-rooms need to be well arranged. Especial difficulties arise in connection with payments which tend to cause delay. Most factory messrooms have special schemes, more or less efficient, to expedite the service. One of the most elaborate is as follows: places at table are assigned to all who signify their desire to dine regularly, and an officer (one of the factory hands) is appointed to look after each group of about twenty. Typed menus for a week are placed on the tables. There are also cards on the tables, one for each

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worker. On Thursday at dinner one marks one's card with an order for Friday's meals, on Friday one orders for Monday, and so on. If one thinks on Friday that he will want roast beef, vegetables and Yorkshire pudding on Monday he marks opposite "Monday dinner" a cross in the "40" column and another in the "9" column (as these are the menu numbers of the desired dishes). The cards are collected and the clerks count up the orders, which are then sent to the catering department. The appointed girls leaving work somewhat early, get the dinners ready for their groups, so that the others merely walk to their places and find there the food they ordered. Those who do not mind waiting, and who are willing to take the risk of not getting what they want, do not order the day before, but wait at a counter till their turn comes. The scheme is not very expeditious and more labour is needed for book-keeping than with other systems. At the end of the week the totals are reckoned, and deducted from wages. A stream of several hundred workers, all desiring to be served at the same instant, needs careful control.'

THE IDEAL CANTEEN, 1916

Miss Proud then gives a description of what she considers the best arrangement for factory feeding.

'A large separate building of some three floors is devoted entirely to the use of the factory workers, being used each day for meals and occasionally for social entertainments, whist drives, dances, etc. The kitchen is well fitted with appliances for preparing and cooking food on a large scale, and the dining-rooms themselves are provided with long counters, the greater part of which consists of "hot plate" for keeping the food hot after it has been portioned out in expectation of the advent of a large number of hungry and impatient workers.¹ Before the counter, at intervals, are placed barriers, similar to those before ticket windows at railway stations, to guide applicants "in" and "out". For the rest, the rooms are fitted with tables and forms or chairs, the tables being composition slabs some eighteen inches wide, on metal stands. Chairs are to be seen only at a few tables which are recognized as those of the overlookers. The

¹ Compare present methods of 'cafeteria' service.

The Ideal Canteen, 1916

heads of the departments have separate rooms, and somewhat apart from the rest are the rooms for the use of the managers or directors. About an hour before the expected rush the dinners are being cut and placed in the hot plate. Then, with the sound of the whistle one hears the rush of feet. Bills of fare are exhibited at the entrance. Each worker, on entering the building, buys from a clerk checks to the value of the food to be purchased, and only these checks are taken in payment in the dining-rooms. The workers pass to the counter, different parts of it being reserved for different types of food—one part, hot meat and vegetables; another, puddings; a third, beverages; a fourth, pastries; a fifth, fruit. No change is given—counters of the exact value of the dishes required must be given—and the workers quickly and quietly carry their food to their appointed places if they are habitual customers, or to the place set apart for occasional users, if they come rarely. Friends will sometimes arrange to get each other's supplies, the only limit being that one must not purchase more than can be at once carried away from the counter. In this way all the diners are quickly supplied with hot food, the clerks at the entrance have within a quarter of an hour totalled the receipts, and, at the counters, the separate receipts show the demand for the different dishes. Once this is in working order on a large scale, it can be run to within a very narrow margin without any previous ordering on the part of the workers, and the privilege of being able to come in and buy just what one feels one wants at the moment is by no means insignificant. In one case workers are served at dinner-time in the order in which they arrive at work in the morning. As the necessity for such a plan arises solely from the inadequacy of the means provided for keeping the dinner hot, it is little more than an admission that some workers will get cold dinners.

‘For a thousand workers to be served at one counter in a few minutes and to carry their food to places scattered over a large room might seem to involve a good deal of noise or confusion or inconvenience, but in practice it can be managed with perfect order, and apparently to the complete satisfaction of all concerned. The chief conditions are: an efficient serving staff, adequate means of keeping the dinners hot, and a good system

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of making payments. Many factories have arrangements of this nature, though no two are identical.'

Extracts have been given at length from Miss Proud's book to give a picture of the general attitude to industrial catering in the early days of the world war 1914-18.

Further evidence of the development of the factory canteen idea is to be found in the Factory Inspector's reports for 1918 and in the book already quoted by two medical experts who had been advisers to the Government on industrial health, namely, *The Health of the Industrial Worker*, by Collis and Greenwood. The Factory Inspector's report for 1918 made the following observations on the subject:

'Far more has to be said of progress by voluntary action and under special war-time arrangements . . . than has yet been effected by orders under the Act of 1916. . . . In the Midlands most firms of any consequence have had successful canteens running throughout the year for both day and night workers. . . . An increasing number of small firms are realizing the importance of canteens.'

It was in 1921 that the book already referred to on *The Health of the Industrial Worker* was brought out by Dr. Edgar L. Collis, Director of Welfare and Health at the Ministry of Munitions, and Dr. M. Greenwood, Head of the Ministry of Munitions Medical Research Board. In this book the authors devote two extremely interesting chapters to the question of 'Feeding of the Industrial Worker' and 'Food at the Factory'. Referring to the fact that as demonstrated by the researches of Mr. B. Seebohm Rowntree 'a not negligible proportion of the inhabitants of these islands was underfed, before 1914', the authors stress the importance which feeding the labouring population acquired in the war years of 1914-18.

'Food', they continue, 'must be studied from a mechanical and also a physiological point of view. Regarding humans as machines, no more energy can be got out of them than is put in.' Physiologically, say the authors, the function of food is to keep the machine in working order and prevent its disintegration. Certain tables are given, based on the researches of sociologists and medical men, which show the calories consumed by

Comparisons of Food Brought and Supplied

different wage-earning groups before 1914. These show that families investigated at York by Seebohm Rowntree consume 2,574 calories per head where wages are under 26s. weekly, 3,590 calories per head where over 26s., and 3,807 among the 'servant-keeping classes'. Board of Trade Industries are as follows:

<i>Wages</i>	<i>Calories</i>
Less than 25s.	2670
25s. to 30s.	2879
30s. to 35s.	3036
35s. to 40s.	3034
Over 40s.	3330

For agricultural labourers the figures are:

	<i>Calories</i>
Northern counties	3085
Midland counties	2868
Eastern counties	3037
Southern and South-Western Counties	3067

Turning to food requirements of various industries, the authors quote the findings of the Food (War) Committee of the Royal Society as showing that carpenters and metal workers require 3,500 calories, a stonemason 4,850, and a woodcutter 5,500. A machine seamstress requires 2,200, a typist, 2,100, a charwoman from 2,900 to 3,600. Experiments show that more calories are necessary for those exposed to cold.

Taking an average weekly expenditure it was found that whereas in 1914 skilled workers devoted 54·8 per cent of their total expenditure on food, in 1918 they devoted 60·6 per cent, with semi-skilled workers the percentages were 56·2 in 1914, against 63·4 in 1918, with unskilled workers they were 56·7 and 64·9.

COMPARISONS OF FOOD BROUGHT AND SUPPLIED

At the time of the Armistice in 1918 the authors reckon one million meals were served daily in industrial canteens. The habit of bringing food to be warmed is deprecated because it defeats the aim of trying to improve the food which is actually consumed by the worker. The gross energy value in calories of

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four samples of brought food are shown as being 871 (meat, potato, pastry), 1,143 (rabbit, pastry), 590 (roast pork, Yorkshire pudding, potatoes, cabbage), and 295 (roast beef, potatoes, cabbage). The total weight in grammes of each sample was respectively: 223 (meat 87), 327 (meat 112), 364 (meat 70), 3,263 (meat 78). Nevertheless 'if an industrial canteen is to be a success', say these authors, 'nothing less than the best must be provided. . . . Give workers a canteen to be proud of and the canteen will soon be proud of its workers.' Detailed suggestions are then made for the erection and equipment of canteens in which for a canteen for 300 persons, eight square feet is laid down as the minimum area per head. Rapidity of service being essential to an industrial canteen, it is suggested that pre-plating the portions in hot plates and the service of meat, soup, and sweets at separate serving hatches is the most efficient method of dealing with a rush.

With regard to the food value of the menu in calories, an interesting analysis is given showing the caloric value of several average bills of fare.

Meat pudding (120 grammes), potatoes (200 grammes), cabbage (120 grammes), and jam roll (160 grammes) yield 1,246 calories, containing 32 grammes of protein, 52.1 grammes of fat and 178.4 grammes of carbohydrates. Roast beef, Yorkshire pudding, potatoes, cabbage, apple pie and custard yield 983 calories, though the protein weight has risen to 44.3 grammes while the carbohydrates have fallen to 122.2 and the fats to 32.3. Liver, bacon, potatoes, preserved peas, and sago pudding give 1,101.7 calories, proteins are 53.6 grammes, carbohydrates 158.4 grammes and fats 25.3 grammes.

The authors state that the midday meal of the average female worker should equal about 1,000 calories. A male worker's mid-day meal should contain about 1,250 calories.

Calories per pound are given in a table showing a number of staple foods, of which the following is an extract:

Beef (imported)	1254.2	Fresh fruit	240.8
Mutton ,,	1643.9	Potatoes (raw)	409.2
Pork	1873.6	Bread	1027.1
Fresh fish	228.0	Flour	1644.1

Comparisons of Food Brought and Supplied

Dried fish	589.6 ¹	Oatmeal	1858.9
Lard (refined)	4218.5	Milk	266.1
Butter	3460.9	Bacon	2707.8
Margarine	3545.1	Dried peas, beans	1625.3
Sugar	1822.5	lentils	
Green vegetables	123.7	Eggs	623.8
Mixed vegetables	94.6	Cheese	1776.0

A weekly dinner menu as suggested by the Canteen Committee of the Central Control Board reads:

<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>
Scotch broth	Pea Soup	Mutton broth
Roast beef	Boiled mutton	Roast pork
Sausage and mashed potatoes	Curried beef and rice	Irish stew
Stewed fruit	Stewed fruit	Stewed fruit
Ginger pudding	Jam roll	Rice or sago pudding
<i>Thursday</i>	<i>Friday</i>	<i>Saturday</i>
Lentil soup	Vegetable soup	Tomato soup
Boiled beef and carrots	Roast mutton	Liver and bacon
Tripe and onions	Steak and kidney pie or pudding	Potatoe pie
Stewed fruit	Stewed fruit	Stewed fruit
Apple tart	Bread and butter pudding	Raisin pudding

The authors sum up by saying, 'A factory canteen, apart from its primary object of supplying wholesome food under favourable conditions, has in it great possibilities as a social institution, where workers meet, make friends, and learn to be part of, and take part in, the life of what should be a valuable humanizing influence, their industrial home'.

By their insistence of a caloric value for the midday meal of 1,000 for females and 1,250 for males, Collis and Greenwood anticipated the findings of the Hot Springs Conference on Food of 1943 in which it was laid down that a third of the total calories required by a worker per day should be supplied in the midday meal.

¹ This is due to the far higher proportion of fat content in dried compared with fresh fish.

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AFTERMATH

In fact it will be seen from the above that in this book the authors, while summing up the experience and lessons learnt from the war in 1914-18, also pointed the way to the future development of the industrial canteen idea. Unfortunately, however, the splendid impetus given to the idea during the war did not bear the fruit which might have been hoped. As soon as the compulsion of war and the difficulties entailed in food restrictions were removed, industry fell back into apathy as regards industrial feeding, and for ten years or so there was comparative stagnation in this particular field of industrial welfare. Evidence of this is abundantly shown in the reports of factory inspectors of the post-war years. In 1919 we find the Chief Factory Inspector's report stating that: 'Although progress is reported and various excellent examples in individual factories are given, on the whole the effect of the inspectors' observations is that by far the greater part of the work of securing adequate provisions of canteens and messrooms in factories generally needing them (when not under orders) remains to be achieved.'

The report for 1920 continues the sad story: 'Undoubtedly, in general, lack of extension of provision of messrooms is attributable in great measure to uncertainties in trade and the great cost of materials and labour. Some very happy and successful canteen or messroom arrangements are reported . . . in old buildings or army huts adapted for the purpose.

'Defective imagination as to what constitutes a suitable meal-room with lack of responsibility for maintenance and supervision on the side of the employers and on the side of the employed, the small percentage of those who use the mealroom when provided, or the misuse of it, can and does bring about an apparent complete failure in some factories of this side of welfare provision.'

So bad had the situation become in 1921 and 1922 that the Chief Inspectors' reports for these years did not even mention the subject though for many years previously a whole section under the heading 'Welfare' had been devoted to canteens and messrooms. In 1923 we read 'many welfare supervisors . . .

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deliberately refrain from starting messrooms because the time is not ripe'. Canteens and restaurants are not mentioned but probably messrooms is meant to include those as in earlier reports. In 1924 a few canteens only are mentioned. And so the story of apathy continues. The majority of firms which had started canteens during the war had closed them down at the end of it.

CAUSES FOR APATHY

The main cause of this accumulating apathy can probably be summed up under three headings: first, lack of enterprise on the part of canteen managers and catering supervisors in 'selling' the idea sufficiently forcefully to both management and personnel: secondly, lack of support from directors and managers, who still tended to look upon a factory canteen as an unnecessary luxury and a nuisance: and, thirdly, indifference on the part of the workers themselves, resulting partly from the lowering of wages from war-time to peace-time levels and partly from an increase in facilities to obtain food elsewhere or a necessity of economizing as much as possible. All these difficulties could have been overcome by enterprise and initiative, imagination and public spirit. As yet, however, except for a few exceptional pioneer firms, there was still lack of understanding and even suspicion of the science of industrial welfare, now incorporated into the whole science of personnel management, the object of which is the provision of conditions to obtain the maximum contribution to the industrial productive unit as a whole from every individual engaged in it.

RATIONING

Before closing this chapter a word should be said about Food Control and Rationing, particularly as they affected the catering industry and industrial canteens. The story is one of interest and even drama, and has been told at length with clarity and a certain amount of humour by Sir William Beveridge in his admirable book entitled *British Food Control*, which his position as Permanent Under-Secretary to the Ministry of Food in the first World War gave him ample qualifications to write.

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From 1914-16 the food problem in England was not acute, nevertheless the Government took two important steps which proved of great value later on, these were, first, the setting up of the Royal Commission on Sugar Supplies in August 1914, and secondly, the secret inauguration of plans for building up a hidden reserve of wheat to ensure adequacy of supplies in case of emergency.

By June 1916, the food situation had become slightly more alarming and prices had begun to rise. In this month there was set up a Departmental Committee on Food Prices which reported the following September. In October of the same year was set up a Royal Commission on Wheat Supplies followed on the 16th November by the establishment of the Food Department of the Board of Trade, exercising compulsory powers under the Defence of the Realm Regulations.

Finally the apprehensions of the country as a whole culminated at the end of 1916 in the fall of the Asquith Government and the establishment of the Coalition Government under Mr. Lloyd George.

Among the many new posts inaugurated by the Coalition Government was that of Food Controller, to which Lord Devonport was appointed in December 1916. Lord Devonport, it will be remembered, had made a reputation for himself as an astute and forceful business man whose activities had been mainly devoted to the food trade. Immediately before his appointment as Food Controller he had been in charge of the Port of London Authority. For a time no startling changes took place. Steady steps were taken to extend the activities of the Wheat Commission however, and in April 1917, the Government took over all the flour mills in the country. This, at that time, was a remarkable step, as *laissez-faire* and respect for private enterprise were deeply ingrained in British society and any departure from these principles was looked upon as somewhat revolutionary and required considerable apology in Parliament. The situation, however, was becoming a little desperate and it was realized that drastic measures were necessary. The U-boat campaign was becoming a serious menace to our peace of mind and the Royal Commission on Industrial Unrest which reported in

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May 1917, emphasized the evil effects on industrial morale of rising prices and faulty distribution of foodstuffs. Matters came to a crisis in June of this year when Lord Devonport fell ill and nobody seemed capable of carrying on in his absence. Questions of the greatest importance had to be shelved or dealt with by the Controller on his sick-bed. Considerable criticism was raised in Parliament of a responsible Minister who appeared incapable of delegating authority and finally Lord Devonport resigned in concert with his Parliamentary Secretary, Charles Bathurst, who was later to become Lord Bledisloe. Meanwhile, it must be said in fairness that a comprehensive scheme had already been worked out for food rationing and the decentralization of control which were ready to the hand of Lord Rhondda when he took over in June that year from his predecessor.

Lord Rhondda proved a very different type of Minister. In the first place he was a trained Civil Servant and knew the value of delegating authority to men who could be entrusted with responsibility. He gathered round him a brilliant team of workers, entirely reorganized the department and, in the words of Sir William Beveridge, established 'complete control over nearly everything eaten and drunk by 40,000,000 persons'. The civilian population was catered for like an army; nothing was left to chance or private enterprise. The whole of the essential supplies, imported or home grown were bought or requisitioned by the Food Controller at fixed prices; the manufacturers, importers and distributors became in various ways his agents on commission: they handled and distributed at fixed prices or fixed margins of profit under his direction.

In August and September of this year was carried out the first registration of householders as a basis of food distribution through the two thousand odd District Food Control Committees and Local Food Offices. The price of bread was lowered by the application of a Government subsidy in September while an Allied Provisions Export Company had already been set up in America in August to ensure the constant supply of food across the Atlantic. The same month saw the issue of a fixed scale of meat prices.

The first move in rationing proper was instituted on 1st

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January 1916, and applied to sugar only. Meanwhile queues were growing for meat and other foods as well. General rationing was started in London and the Home Counties on 25th February 1918, and extended six weeks later throughout the country. The Food Ministry was consolidated in July, by the death of Lord Rhondda. Fortunately, the bulk of the pioneer work was done though its main work in point of chronological length still remained. The continuance of its war-time effectiveness, however, now fell into the hands of Mr. Clynes, who as a levelheaded representative of the working classes had worked side by side with Lord Rhondda as Parliamentary Secretary.

One important principle which was established in the first World War rationing was the distribution of meat not according to weight but according to value. Thus at the outset was eliminated all possibility of discrimination between rich and poor as to quality. 'What's your choice, Guv'nor?' asked a labourer of a peer of the Realm in a *Punch* cartoon as they looked into a butcher's window. 'Mine's a couple of sausages.' To which the peer answers sadly, 'I was just wondering how much saddle of mutton I could get for fivepence.' This and many other principles established at this time proved of the utmost value to legislators of the second World War. Measures which had brought in with the utmost temerity in 1917 and 1918 were repeated with no misgivings in 1940. The nation had been broken in to rationing and the wise principles of Lord Rhondda lay ready to hand as foundations for an even more extensive scheme of control.

One fundamental difference between rationing in the two wars, however, lay in the treatment of the catering industry. In the 1914 war anyone eating outside their own homes was obliged to surrender meat coupons for any meat served to him. Thus restaurant proprietors, club and hotel managers, proprietors of teashops and coffee stalls and the managers of industrial and school canteens and other public feeding centres were given an enormous amount of office work which was eliminated in the second World War by a greatly simplified arrangement.

Here are the details of the two schemes:

The Rationing Order of World War I recognized three classes

Rationing

of establishment: (a) Catering Establishments; (b) Institutions; and (c) Residential Establishments.

Class (a) included hotels, clubs, restaurants, teashops, coffee stalls, school feeding centres, canteens, day schools, and generally establishments providing meals to persons who did not get all their meals there. For meat meals they had to detach coupons or half coupons from their customers and were rationed according to the coupons collected by them. Many, we are told by Sir William Beveridge, preferred to give up serving meals in such circumstances.

For food other than meat these places were rationed in bulk, according to the number of meals served. This was done according to a system introduced under the Public Meals Act of January 1917, which came out over a year before rationing came in generally. These establishments did not have to take coupons (other than meat) from any but resident customers, nor except to such customers could they supply sugar at meals except in cooking. Catering establishments had to keep records of meals served; exemption from this rule and from the bulk rationing of sugar and fats was allowed only to railway buffets and to cheap eating-houses or teashops where no meals were served at a price exceeding 1s. 2d.

The actual amounts of various foodstuffs varied considerably, but to summarize them briefly, taking meat first, each of the four weekly coupons on an ordinary card represented one quarter of the weekly ration, that is to say the equivalent of 5 oz. of average butcher's meat (including pork), suet and edible offal, on a price basis. That is to say the surrender of one ordinary coupon enabled a purchaser to buy either:

(i) Fivepence worth of uncooked butcher's meat (including pork), suet, kidneys, tongue or skirt, or 10d. worth of other edible offal, according to a fixed schedule of prices; or:

(ii) Five oz. of bacon or ham with bone or 4 oz. without, $3\frac{1}{2}$ oz. of cooked butcher's meat with bone, or other weights of various meat as set out in a 'Table of Equivalent Weight'.

(iii) A meat meal or meals in a catering establishment.

The catering establishment detaching a coupon or half a coupon was not bound to serve any particular weight of meat

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to any customer, but was required to produce sufficient coupons to the Food Office to account in bulk for the whole of the meat used by them. On an average, therefore, they could not supply in meat meals more meat on each coupon than could be obtained by each customer buying meat from a retailer. Supplementary ration cards were issued to persons performing bodily labour. These were divided into three grades. Not more than three out of four coupons for each week (representing 1s. 3d. worth on an ordinary card) could be used in any week for the purchase of butcher's meat or pork, or offal or suet sold by a butcher. The fourth coupon for each week was distinctively marked accordingly. Any of the coupons could be used for the purchase of other meat or meat meals.

In the case of butcher's meat and bacon (including ham), registration of customers was enforced, that is to say, the retailer was only able to supply meat to a customer registered with him. Persons living in establishments did not have to register.

With regard to other foods, sugar was rationed nationally from 31 December 1917 to 29 November 1920. Until 27 January 1919 the ration was 8 oz. per head weekly, after which it rose to 12 oz. until September 1919. During the railway strike of September–October 1919 it fell to 6 oz. and again from January–March 1920. Otherwise it was 8 oz. from 13 October 1919 to 9 August 1920, and 12 oz. to 3 October 1920, and 16 oz. until derationing.

Butter and margarine were rationed locally from 14 December 1917 to 18 July 1918 and were put on a national rationing basis in June 1918. Margarine was derationed in February 1919. The ration started at 4 oz. and rose to 5 for both fats in June 1918. After 16 February 1919 the butter ration started at 1 oz. alone and fluctuated between 1 and 2 oz. up to May 1920.

The ration for jam was 4 oz. at the outset. Tea, 2 oz. in most local rationing schemes. As regards prices of butcher's meat these fell from 1s. 3d. to 10d. in May 1918. They averaged about 11d. Bacon started at about 5 oz.; was raised to 8 oz. on 5 May 1918 and to 16 oz. on 14 July.

Now let us look at the recent war and see how the methods compared.

Rationing

The following description is taken from an official Ministry of Food pamphlet issued under the general title of *Our Food To-day*.

Food rationing began in the United Kingdom in January 1940 with butter, bacon and sugar. Since then rationing has been extended to include nearly all important foods, in some form of rationing or scheme for control of distribution.

As in World War I it is compulsory for the consumer to register for basic foods such as fats, sugar and meat with a fixed retailer. A new feature of rationing for the recent war however has been the issue of 'points' which can be spent at any retailer desired by the consumer and which vary with each commodity according to the general supply available. 'Personal Points' for sweets and chocolates are also a new feature of the system. A number of general distribution schemes for the benefit of special social groups such as nursing mothers, infants, school children etc., have been instituted which have proved extremely valuable.

Passing over the details of rationing which are general knowledge to most people by now, we come to the question of catering establishments and institutions.

For the purpose of the Ministry of Food, Catering Establishments include hotels, inns, public houses, clubs, restaurants, cafés, tea shops, coffee stalls, staff dining-rooms, school feeding centres, and factory or works' canteens, all of which provide meals to non-residents.

'Institutions' include hospitals, sanatoria, infirmaries, orphanages, poor law institutions, prisons and boarding schools, most of which have a number of permanent residents who do not, as a rule, take any meals outside the institution.

Until 26 July 1942 there was a third class, as in World War I, namely, 'Residential Establishments'. This class included boarding and apartment houses, purely residential hotels and nurses' hostels, which as a rule provided meals only to residents staying for a week or more at a time and which bought rationed or controlled foods by using the ration books of their residents.

Former establishments in this class, we are told 'which could satisfy a Food Control Committee that it was impracticable for them to shop as a household, are now licensed as catering

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establishments. The rest of the residential establishments continue, as in the past, to use the individual ration books of their residents, but no longer require to be licensed'. It is however now necessary for each individual resident to be registered with a retailer. Formerly only the establishment had to be registered. Those who only stay a short time may use temporary ration books.

'Institutions, though they are in general provided with food on the basis of the household rations, do not shop on ration books but receive authorities to obtain their supplies of food on that basis. Those of them which require to serve meals to non-residents, e.g. non-resident staff of hospitals, or day scholars at boarding schools, are provided with additional food on the scale of allowances applicable to catering establishments.'

With regard to catering establishments, the basis of rationing or control is to restrict supplies of rationed or controlled commodities (including points foods) to the catering establishment to amounts roughly equivalent to those obtained by the domestic customer. In this way an allowance is arrived at which is in general related to the number of meals of various types or hot beverages which are served by the establishment. For example, each meal served qualifies for an allowance of $\frac{1}{8}$ oz. of sugar and each hot beverage served for the same allowance.

In general where the domestic consumer is required to register for supplies, so is the catering establishment. The purchase may be made either from a wholesaler in the case of large establishments, or from a retailer, but, generally speaking, only one supplier for each commodity is allowed. The authority to purchase is adjusted from time to time in the light of the business done by the establishment as disclosed by returns of the number of meals and hot beverages served which it is required to make to the local Food Office every eight weeks.

The only commodity for which a limit is placed on the purchase of catering establishments where none exists on those of the ordinary consumer, is fish. Since 13 December 1942, supplies of fish to catering establishments have been restricted as with rationed foods on the basis of the number of meals served. The allowances vary from time to time in accordance with supply.

Rationing

Under heading 'Special Establishments' the pamphlet continues: 'Special scales of allowances have been prescribed for certain types of establishments such as industrial works' canteens, commercial catering establishments of which the customers are wholly or mainly industrial workers, school feeding centres, wartime nurseries, Youth Service centres and voluntary canteens serving members of H.M. Forces. In this way the normal scale of allowances to catering establishments has been superseded in particular cases by an improved scale.

'Arrangements are in existence for assisting types of establishments which are of importance to the war effort, e.g. factory and works' canteens, hospitals and school feeding centres, to obtain supplies of certain manufactured foods and certain unrationed foods in short supply.

'All persons staying in a catering establishment for five consecutive nights or more must surrender their ration books to the management in order that the appropriate coupons for rationed and points rationed foods and soap may be cancelled. Certain other classes of persons are liable to have their coupons cancelled by establishments, e.g. employees of an establishment, who, though not resident, obtain substantially all their meals there on five or more days in each week. In addition, the Minister and Food Control Committees have power to require establishments to cancel coupons of persons other than employees who take substantially all their meals in an establishment on five or more days in each week, e.g. workers housed on constructional camp sites and fed from a works canteen maintained by the works' management for their benefit.

'The reason for requiring the surrender of coupons from these classes is that they are provided with meals by the establishment and do not therefore require to use their ration books: their coupons are therefore cancelled and not used.

'Personal Points coupons are detachable from the general ration books, whether the holders are living in a household or in an establishment; in these circumstances their surrender to the management of establishments is not required.

'If an establishment has cancelled the coupons in the ration book of any person for three weeks in any period of four weeks,

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the management is required to forward the ration book to the local Food Office in order that any registrations with retailers which the holder may have effected should be cancelled. This prevents the retailers from obtaining supplies for the holder of the book which he will not need because he is for the time being provided with meals by the establishment.

‘Establishments are required to notify the Food Offices of the name and address of any person who is required to produce his ration book for the cancellation of coupons and who refuses or is unable to do so.

‘Persons living away from home in catering establishments but going home every week-end may get a Temporary Ration Document R.B. 12 every fourth week. This entitles the holder to a week’s rations. Similar arrangements are made for those living in institutions.’

SUMMARY

Though certain anomalies are bound to occur, it will be generally agreed that the more recent system is simpler on the whole and provides less work for the caterer. Nevertheless one’s sympathy has often gone out to the Catering Officers at Industrial Hostels where though the problem is obviously one of Industrial catering, the whole thing is carried on in an individual basis. Complications are particularly apt to arise where, as at certain miners’ hostels in the North and Midlands, extra rations are allowed for heavy workers. On the whole, however, the Ministry of Food has done a good job which few people, in spite of individual grumbles, can really deny. It is true that queueing, which was looked upon with such horror in 1917 and was claimed to have been abolished by rationing in 1918, has been a fairly constant feature of the late war and seems to be extending well into peace-time. On the whole however the people of this country have been fed and fed, in the circumstances, remarkably well. If there has been any class discrimination, it has been the working classes who have benefited by it, as it should be, not those with money or special privileges. Priorities have been given where they were most needed and sane group distribution has been fostered. A study of the ration-

Summary

ing system of the late war, however, cannot fail to show what a tremendous debt it owes to the pioneer work of the war before when rationing was both unknown and unpopular. That the machinery was already there to be extended and adapted was due to the foresight and initiative of Lord Rhondda, building on the foundations already laid in part by his predecessor, whose work he in turn greatly extended and consolidated.

Chapter IX

INTER-WAR AND SECOND WAR

In spite of the apparent apathy following on the 1914 war—and partly as a result of it—since diseases also stimulate efforts to cure them—a new attitude slowly began to emerge towards welfare and management in industry. Organizations began to appear one by one to foster and extend this new attitude. The basis of this attitude was scientific. There was a feeling in the air that business matters as a whole could not be left to chance: that effects could be traced to definite causes and that the scientific study of these causes would enable employers and entrepreneurs to increase efficiency and turnover. The movement started in America with what was known as ‘scientific management’. Pioneers such as Grant and Taylor brought out their findings of extensive studies of industrial processes. Men were carefully timed and observed and special environments were created for experiment in changes of efficiency. Efficiency experts such as Bedaux and others offered their services to factories to ‘speed-up’ industrial processes. The National Institute of Industrial Psychology was formed in England, also the Industrial Welfare Society and various other associations dealing with personnel management, labour management and so forth. The main basis of all these societies was to emphasize the necessity of studying the personal factor in industry from a scientific viewpoint, to discover what factors made for greater or less efficiency, and so increase the output of the worker. It was the age of the emergence of the expert, a typical example

Obstacles to Progress

of which was the growth of an entirely new profession—the profession of the advertising agent. Hitherto advertising had been a ‘hit or miss’ affair dependent on the ‘brainwaves’ of directors or managers. After the 1914 war, however, groups of men got together to study advertising scientifically and discover how the best results could be obtained from a given outlay. This involved ‘Market Research’ and other scientific activities whereby demand could be tested and classified and advertising correlated with consumer needs. And just as the human needs of the consumer were put under the scientific microscope of the investigator and the statistician, so were the human needs of the producer—the machine-minder, the clerk, the engine-driver, and the iron-worker also submitted to scrutiny. Not only was it beginning to be realized that the worker needed a certain amount of fuel to produce a given amount of output—it was also beginning to be realized that the way that fuel was administered was also of importance if it were to do its job. Just as the sales expert found that the way goods were packed and presented were important factors in the demand for them, so did the intelligent personnel or welfare expert realize that environment had a considerable effect on the output of the worker and the canteen manager realize that the way food was cooked and presented and the surroundings in which it was served and the methods of serving themselves had a considerable influence on its nutrition. So in matters of industrial feeding, as in matters industrial generally, the expert began to emerge and show by statistical analysis that his services were of vital importance.

OBSTACLES TO PROGRESS

The process, however, was slow. The depression which followed our disastrous financial policy of 1925 and culminated in the General Strike of 1926 did enormous harm to progressive experiments in industry. Firms which are struggling for their bare existence dare not take the risk of new experiments however clearly it can be shown on paper that those experiments will eventually save them money. New plant and equipment cost money and in a period when prices are falling rapidly and demand is falling off through lack of purchasing power—directors

Inter-War and Second War

are not generally in the mood to listen to new ideas. It is like expecting a drowning man to listen sympathetically to instructions how to perform the 'American Crawl' when all he wants is to keep his head above water and get to safety. So only a few outstanding firms were able to benefit by the great impetus to production and efficiency engendered by the new scientific attitude to human problems. Those firms were generally such as had already introduced successful welfare experiments in the past and could afford to extend those experiments, or else they were the large combines who, by amalgamation and financial reorganization, were in a position to withstand the fiercer winds of intense competition and dwindling markets. These firms grasped eagerly at scientific methods of increasing efficiency and ultimately saving costs, because they saw that in the long run not only their workers but they themselves would greatly benefit. Also their reserves were large enough to enable them to install the equipment necessary to promote the innovations and to wait for the results to materialize. To them the expert with his scientific knowledge was a money saver. They did not dismiss his ideas as 'new-fangled, highfalutin' nonsense', on the contrary they embraced them as methods not only of extending the efficiency of their workpeople but of ultimately economizing by increasing output and decreasing costs.

In the 1930's smaller firms which had managed to survive the economic blizzard began to see the wisdom of these new methods, and welfare services and canteens received a new impetus. A consolidation took place of scientific information on management and welfare and there was a widespread realization that—as Miss Proud had said in 1916—canteens could not be left to amateurs and inexperienced people to run. To run a canteen, or any other welfare service successfully and effectively, so that it could be an asset and not a liability to a firm—expert management was necessary. Some firms appointed expert caterers within their organization, others made use of the expert knowledge and experience of catering contractors: firms who had devoted time and study to industrial catering problems and had long experience of catering for large numbers behind them. True, industry was still very much in the doldrums—but the

Community Centres

more progressive firms had, on the whole, managed to survive and the experience and knowledge gained during the previous years was beginning to bear fruit. The industrial canteen, run by an expert caterer, either within the firm itself or from outside it, began to emerge as an essential welfare service—based not on philanthropy but on a scientific realization of the needs of the industrial worker if he were to make his full contribution to industry. Hard times had done much to eliminate guesswork. The industrialist could not afford to take chances. Like Field-Marshal Montgomery, the industrialist felt he could not risk going into battle with his competitors unless he knew he had every possible chance of winning. So the industrialist called in the scientist, whose sphere of activity was not guesswork or luck, but exact knowledge based upon observed experimental phenomena and tabulated experience.

THE SCIENCE OF NUTRITION

Meanwhile, great strides had been made in the science of nutrition. Biochemists had been experimenting with vitamins and important discoveries had been made. The effects of diet had been observed on glandular secretions and great fields of knowledge had opened up in medical science on the relationship between health and the endocrine system. So the catering expert and canteen manager found he either had to be something of a scientist himself or else he had to call in the aid of the biochemist and the expert on nutrition. The chain of scientific knowledge was endless and the necessity for research and experiment was made a hundredfold stronger. It was realized that every department of a man's life had its importance in relation to his work, because it also had a relationship not only to his physical health but also his mental and psychological outlook.

COMMUNITY CENTRES

In 1926 a group of biologists and doctors founded the Pioneer Health Centre in Peckham which later came to be called 'The Peckham Experiment'. Its object was to study the principles of health in an industrial community. The families studied in the Peckham Experiment were largely the families of industrial

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workers. Peckham was more than a pioneer community centre, it was a biological observation of human behaviour in modern industrial society, and its findings have been of the greatest value to welfare workers and experts in nutrition. The researches among Peckham industrial workers made possible by its work and equipment show how great a proportion of the average industrial community are suffering from faulty diet and the physical disorders which result from it. By treating the family as a biological organism, the Peckham investigators were able to trace disorders through all their stages and to fasten their causes to the correct source. By establishing their own restaurants and canteens the Centre was able to remedy many ill-effects of bad nutrition and by establishing cooking classes for housewives the Centre laid the foundation of a better understanding of food values.

THE FACTORY IN THE COMMUNITY CENTRE

But the community centres such as Peckham are unhappily few and the community centre idea is still in its infancy. A more natural community centre began to grow up in industry during these years with its nucleus in the factory itself. Thus one well-known firm of food manufacturers, with a long tradition of welfare behind it, became large enough to be, as it were, its own community centre. This firm has eleven restaurants, medical and dental services, extensive playing fields, youth clubs, schools, a large entertainment hall and a variety of other services all laid on within the factory area. There is no specific 'welfare' department—every executive is potentially a welfare officer and each contributes his or her share towards the welfare of the employees as a whole. The firm, like one or two others, has even gone so far as to provide a housing estate for its employees, who before the 1939 war all lived within easy access of the factory. The firm is essentially a 'family' business and there is a sense of family relationship between the employees and the firm which is still, though over a hundred years old, directed almost entirely by members of the original founder's family.

There are many other firms which can be enumerated who have established equally extensive welfare facilities. A large

The Second World War

multiple tailoring firm in the North of England has a canteen capable of seating eight thousand occupants at one sitting. Here also medical and dental services are available and careful records are kept of the progress of each employee throughout their career with the firm. A great deal of money has been spent by the management on giving the workers the most perfect conditions possible to do their work and every reasonable service to keep up a high standard of health. The canteen has the most modern and efficient equipment and also is organized on a basis which makes possible serving direct from oven to consumer—a rare occurrence in most industrial canteens. The common practice is to cook the meat the day before it is served. The following day it is carved on a mechanical slicer, reheated with gravy and served from a hot plate.

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One could mention scores of firms which have established highly efficient welfare services embodying up to date and well equipped canteens in which expert experience and careful thought has been used to ensure the maximum nutritional value to the worker. For this, after all, is the object of an industrial canteen, namely to ensure that the worker obtains, at a price within his or her means, meals which are sufficiently nourishing and wholesome to keep his or her health up to the maximum. And this, as has already been stressed, is essentially an expert's job. The lesson was learnt in those dark days of the 1930's and the effect of that lesson was tremendous, because when war came to this country in 1939 it already had the skeleton organization for a nation-wide industrial canteen system without which, it is no exaggeration to say, it would never have won the war. The 1914 war had already proved the point that a war-strained population cannot give of its best in industry unless it is given adequate and well-chosen nutriment.

One of the factors in improved industrial canteen service was the founding in 1937 of the Industrial Catering Association. This Association came into being as the result of the 1937 Catering Trades Exhibition at Olympia. Its objects, as set out on its official application form for membership, are:

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1. To raise the standard of industrial and institutional catering generally, by providing facilities for:

(a) The interchange of knowledge amongst those persons engaged in catering on a non-commercial basis, in industrial organizations, civic and other institutions, stores, offices, etc.

(b) The collection, publication and dissemination of relevant information on all aspects of catering management.

(c) The holding of meetings for the reading of papers, delivery of lectures and discussion of matters affecting the management and operation of non-commercial catering establishments.

2. To create standards of proficiency and training in catering management and to protect the interests of catering managers and manageresses.

3. To provide various grades of membership of the Association and to admit candidates thereto according to training and experience.

4. To maintain the closest liaison with appropriate Government Departments and other National and Public Bodies, in order to secure the adequate representation of members' interests.

5. To secure the wider application of the direct-management, non-profit making method of catering in appropriate establishments, in the mutual interests of employers and employees.

6. To assist industrial managements, institutional, civic and other authorities faced with internal catering problems, to secure the maximum efficiency, with the best value to the consumer, in the operation of their catering departments.

7. To do all such other things as are incidental or conducive to the attainment of the above objects.

Qualifications for membership are:

1. Full Members.

Full membership of the association is open to all persons holding an active managerial position in industrial or communal catering of a non-commercial nature who have:

(a) (i) An approved catering qualification and have had at least one year's managerial experience in catering; or

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(ii) Have had at least three years' managerial experience in catering; and

(b) Are sponsored by two Full Members; and

(c) Are approved by a Branch Committee and accepted by the National Council.

2. Associate Members.

Associate Membership of the Association is open to all persons engaged in industrial or communal catering of a non-commercial nature who are:

(a) (i) Caterers of approved supervisory status, but who do not qualify for Full Membership, or are

(ii) Trainees or Students taking approved courses for Catering Management; or are

(iii) Holders of Domestic Science Diplomas or Certificates and

(b) Are approved by a Branch Committee.

Membership, in any grade, is not open to persons engaged in industrial catering contracting or employed by industrial catering contractors.

THE FACTORY CANTEENS ORDER

In 1940 was made the factory canteens order whereby every factory employing over 250 people was obliged by law to provide a dining-room where they could obtain wholesome meals at reasonable prices. From then onwards the expansion of industrial canteens was rapid. According to figures issued by the Ministry of Labour the number of factory canteens in April 1942 was 7,528; within seven months it had grown to 11,635. In October of that year the Parliamentary Secretary to the Ministry of Food stated that four and a half million meals were being served weekly in factory canteens. In January 1945 this figure had risen to fifty million including meals served in British Restaurants which were designed to feed workers for whom factory canteens were not available. These astounding figures could not have been reached without the research experiment and experience of the years before. The foundations were laid in the inter-war years and particularly in the rapid increase of production which took place in 1938. The 'shadow factories' set

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up in anticipation of the expansion of the armament industry were built with canteen facilities and equipment, and often experts were called in from outside to run them. Many firms realized that industrial catering is a highly specialized undertaking requiring considerable experience and expert knowledge. It was appreciated that it would be wiser to employ a catering contractor than to put in an amateur whose experiments might be wasteful and ineffective. Thus many big industrial catering firms came to the fore and did some magnificent work. Some of this work was pioneer work and done often under most difficult conditions. On new building sites, often in remote and almost inaccessible places for security or strategic reasons, contractors' vans often had to traverse tremendous distances in order to distribute meals to outlying workers. As the 'blitz' developed and canteens and factories were successively bombed, catering problems became almost insurmountable in certain localities. But canteen workers carried on—knowing that their comrades depended on them for the hot meal which they needed to keep them going. Hundreds of instances have been recorded of every type of improvisation and often heroic devotion to duty under real front-line conditions. Women and young girls showed equal fortitude to that of men, knowing that it was the worker's duty to provide the armaments which would keep our men fighting in the field. If an army marches on its stomach, as Napoleon is supposed to have stated, so does the industrial worker produce his best work when his stomach is well looked after. And this industry realized in the last war even more abundantly than it had in the war before. In the 1914 war only specific factories working on armaments were required by law to provide canteens, in the recent war every factory over a certain size was required to have one, and every facility was provided to ensure the efficiency of these canteens.

ADVICE AND ASSISTANCE

In 1939 the Industrial Welfare Society brought out a most comprehensive booklet containing advice on starting and running industrial canteens with every possible detail enumerated. This booklet entitled *Canteens in Industry* was republished in a

Advice and Assistance

second edition two months later. Third, fourth, and fifth editions were published in each succeeding year. This handbook covered a variety of subjects including Canteen Planning, The Kitchen, Management and Service, Food and Diet, Emergency Feeding, and Flooring, Decoration and Furniture. In the first chapters of this book the authors stated: 'The works' canteen of to-day has become an accepted and essential part of large-scale industry and few would deny its benefits from the point of view of health, efficiency and well-being. Under conditions of production in war time its function becomes even more important. Recognition of the value of large-scale feeding in economizing the use of foodstuffs, and in replacing disorganized domestic arrangements has led to a wide extension of communal feeding throughout the country. There are additional reasons for providing such facilities for industrial workers, and the need has become so evident that the Government has issued orders requiring the provision of canteens in certain types of industrial establishment, in docks, and on building operations or engineering construction. Many firms are meeting the need for feeding facilities by starting new canteens; others have had to expand their peace-time services. . . .

'Pre-war research', continue the writers of this booklet, 'has shown conclusively the close connection between good feeding and good health and has revealed moreover, how widespread is malnutrition amongst the workers of this country. In many cases malnutrition is due to ignorance of what constitutes a good dietary, but in numbers of cases it is equally due to inadequacy of income to meet essential costs of good food. This is particularly the case with large families, with workers who have suffered from long periods of unemployment, with women and juveniles whose wage levels are low and with heavy manual workers whose daily expenditure of energy necessitates particularly substantial meals. The factory canteen can supply inexpensive and good meals which can do much to combat the effects of malnutrition, and hence improve efficiency and general health. The needs of special groups of workers and others may be met in the firm's canteen to the benefit of all concerned.

'The Factories Act, 1937,' continues this report, 'forbids the

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eating of food in workrooms used for certain dusty and dangerous processes and forbids women and young persons as a general rule to remain during mealtime in a workroom where a manufacturing process is being carried out. Thus the law has enforced in a limited number of factories the practice of a far greater number of which have recognized that if the full benefit is to be obtained from the break for lunch, facilities should be provided for the workpeople to leave the workrooms and partake of their lunch in a messroom or canteen, where the air is fresh and the atmosphere free and cheerful. The opportunity to relax in comfort provided by the canteen is one of its most important functions. Many employers feel that, quite apart from questions of greater efficiency, contentment and better health records amongst employees, they can perform a most useful social service in establishing a canteen and it is their duty to make this provision for the comfort and convenience of their workpeople.

‘These arguments not only hold good in war-time, but are strongly reinforced by others. Works’ canteens are an indispensable part of industrial war-time organization because large numbers of workers have literally no alternative place where they can get a hot meal. In peace-time many employees live too far from their work to be able to go home at midday, but in most cases someone is able to prepare meals for them before and after work. To-day many workers, both old and young, have no one to cook for them a hot meal at any time: the wife or mother may be evacuated; in many billets, no meals are served, and hours of work are often so long that men and women living on their own have neither time nor energy to shop or cook. It is, therefore, more than ever necessary that workers should not be dependent for the food they get during working hours upon snacks or packet lunches brought with them to the factory or on refreshments which can be bought at cafés or coffee stalls. In any case, facilities outside the factory may often prove entirely inadequate and the prices charged may be beyond the reach of the average worker. . . .

‘Overtime, shift and night work have become a normal part of factory life, and the provision of breakfasts, suppers and teas

Canteen Planning

as well as the usual midday meal, has therefore become an important part of the canteen's function. . . .

'Finally, long hours at the bench and exhausting journeys to and from work throw an enormous and unaccustomed strain on the health and morale of industrial workers and particularly of those many women who are now going into factories for the first time. The beneficial effects of good (and inexpensive) meals on health and general well-being during a time of stress cannot be emphasized too strongly. During the 1914-18 war many of the simple precautions for safeguarding the health and safety in industry were relaxed with disastrous results on output, contentment and morale. These mistakes were in part rectified by the Ministry of Munitions Welfare Department, but for many the years of factory work during that period remain as dark memories. There is to-day no need to repeat the mistakes of a generation ago.'

The writers continue: 'A canteen planned and equipped to meet all the needs of the factory can play a decisive part in ensuring the smooth and happy working of an industrial community. Success does not depend on size or on elaborate equipment. The essential requirements are that accommodation is clean and bright, the food good and inexpensive, the service quick and efficient, and the atmosphere of the canteen friendly. These can be obtained in the very small canteen no less than in the large, if careful thought is given to initial planning and in its subsequent running full weight is given to the desires of the canteen customers.'

2. CANTEEN PLANNING

Under the heading of 'Planning the Canteen', the authors make the following remarks:

'Of the canteens which have been opened during the last few years some have been quite unpretentious, just a single dining-room, simply furnished but painted in pleasing colours, with the necessary kitchen, storage and staff rooms; others have been designed on almost luxurious lines, having several dining-rooms with modern furniture and fittings, large recreation rooms and dance halls, sun terrace and so forth. Most of the canteens

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opened have quickly justified their existence, but, unfortunately, there have been some which have not been as successful as was hoped. Sometimes the need has been overestimated, sometimes the canteen administration has been at fault; in other instances again it has been highly successful in so far as it has fulfilled a real need but errors of planning have made organization unduly difficult and a considerable amount of reconstruction has been necessary.

‘In the main these setbacks have been due to lack of adequate preparation and planning,’ continue the authors, who enumerate four essential steps in preparation. These are:

‘1. Estimate as closely as possible the number of employees likely to use the canteen and the kinds of service most needed.

‘2. The site must be decided (if there is any choice) and the necessary accommodation determined.

‘3. Consultation should take place between the management and the specialists responsible for the various aspects of the planning.

‘4. Arrange for visits to other canteens to study their problems and layout.’

The authors then go on to give a detailed and most practical and helpful guide to the setting up of industrial canteens of all sizes and possible scope, into which it would take too long to enter fully in a work of this description. Some of the headings, however, serve to illustrate the thoroughness with which the task has been carried out and the practical value of the suggestions. These headings include:

Joint canteen services with other factories; Satellite canteens; Service counter; Lighting; Temperature; Ventilation; Kitchen layout and equipment; Choice of fuel; Management and service; Advantages of Contract Service; Canteen Committees; Tea stations and trolley services; Finance; Payment and Ordering; Staff; Food and Diet.

3. DIET AND NUTRITION

Under the last heading there is much that is worth quoting and it is therefore proposed to give a brief summary of the main points of the chapter devoted to it, written specially by Miss

Diet and Nutrition

M. T. E. Pearson, who holds a first class diploma of the Edinburgh College of Domestic Science.

‘Every canteen supervisor’, writes Miss Pearson, ‘requires a working knowledge of nutrition, that is, a practical knowledge of food and its effects on the human body. This is even more important in war-time than in peace as working hours are longer, work more intensified and the general atmosphere more strained. The food must not only be the best possible the canteen supervisor can obtain, but must contain an ample proportion of protective foods, in order to combat fatigue and prevent over-strain.’

The writer might have added that the difficulty of obtaining food in periods of war and war aftermath, make it essential for the canteen to obtain the maximum nutritive values of foods in order to obtain the maximum nutrition from the scanty supply available. We have seen how in the past, the most appalling mistakes were made in relative values of food, for body-building and energy-giving purposes, and this in itself should be a warning for all who go in for large-scale catering to study the question of nutrition from a scientific angle.

‘Food’, continues Miss Pearson, ‘has three primary uses:

‘1. To build and repair the body.

‘2. To provide warmth and energy.

‘3. To protect the body against disease.’

She then goes on to discuss the contribution made by proteins, both animal and vegetable, to body building. ‘The main sources of animal protein are milk, meat, fish, eggs, and cheese, while the sources of vegetable protein are nuts, cereals (particularly oatmeal) and the pulses.’ Vegetable proteins alone cannot build body tissues, but must be combined with animal food. Proteins cannot be stored but must be provided daily.

Energy-giving foods are the starches, contained in bread, cereals, potatoes, sugars and fats. A larger proportion of these foods are required where manual work is undertaken. Fats give the highest amount of energy in proportion to their weight and sustain longer.

‘Protective foods are those which contain mineral salts and vitamins, which fortify and safeguard the body from disease

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and infection.' Protective foods fall roughly into five main groups:

Vegetables and fruit.

Dairy produce.

Fish.

Liver and other glandular organs.

Unmilled cereals: Oatmeal and Wholemeal flour.

The first group contains Vitamin C though vegetables lose much of this by cooking. Vegetables also contain the 'sunshine' Vitamin A and minerals such as calcium, iron and iodine.

Milk is a food par excellence and should be taken in every possible form including cheese. Vitaminized margarine is equivalent in value to butter and contains, like butter, the fat-soluble vitamins.

Fish contains valuable iodine necessary for the thyroid gland. Herrings, mackerel, sardines, salmon—tinned as well as fresh—also contain Vitamins A and D.

Liver, kidney and heart contain iron and Vitamin B necessary for the nervous system.

Unmilled cereals are also sources of Vitamin B and contain a certain quantity of fat.

Miss Pearson goes on to give some valuable hints on menu planning. She gives a special sub-section to food allowances, and two others to portions and food rationing.

4. FACTORY AND CANTEEN LEGISLATION

An interesting summary is given in this booklet on the law as it applies to industrial canteens. Of particular interest is the Factories Act of 1937 which enacts that 'women and young persons under eighteen are not allowed to remain during a meal interval in a room in which a manufacturing process is being carried on'.

Under the War Emergency Regulations of 1940 and 1941, 'efficient and suitable canteens where hot meals can be purchased may be ordered by the Factories Inspectors to be provided in a munitions or other factory employed on government work, and employing more than 250 persons: in building and engineering operations, in constructing munition factories,



16. Works dining room showing 'Service' and a theatre stage



17. Peak hour in a large canteen

MURALS AS CANTEEN DECORATION



18. Meeting of Cortez and Montezuma in Mexico by H. W. Smith



19. Youths' dining room with paintings by H. E. Schwarz

Factory Canteen Control

aerodromes, defence works, etc. on behalf of the Government, and in any docks.'

An interesting point arises in connection with the Truck Acts, whose influence, in the past, to stop many harmful abuses we have already noted. The situation is summed up by the writers as follows: 'If persons using a canteen pay cash for their dinners and not by deductions from wages there is no restriction in law as to the prices which may be charged. If, however, manual workers have the prices of their dinners deducted from their wages only the actual cost of food may be charged. . . . What is meant by the actual cost of food is not defined in the Act (Truck Act, 1831, sec. 23) but it is submitted that it should include lighting, heating water, and labour, but not rent.'

It is a common practice to give canteen workers food as part of their wages. As canteen workers come into the legal category of 'domestic workers', to whom the Truck Acts do not apply, this is perfectly legal, provided the canteen is run by the firm for the benefit of their own workers. Where a canteen is run by an outside firm for profit the situation is different. A signed authority from the canteen employers agreeing to such deductions is advised.

FACTORY CANTEEN CONTROL

This naturally brings us to the Control of Canteens. At the present time almost every canteen is managed by a manager or manageress with experience and knowledge of the catering trade, showing that the recommendations contained in Miss Proud's report of 1916 have been actually put into practice during the last thirty years. These managements are, in turn, controlled by a committee of the factory's employees, by the factory owners direct or by a firm of caterers. There are a variety of opinions regarding these three methods of control and this book has no intention of suggesting which is the most satisfactory. Each method has points to recommend it and time alone will prove which is the most efficient method.

It would appear, however, that there are certain main essentials for the efficient operation of a canteen. The first is a really efficient management, so rightly stressed by Miss Proud in her

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report on canteens during the first World War. A large amount of the detail work, the smoothness of service and general standard of quality and cleanliness must be the direct responsibility of the local management.

The second essential is an adequate control system covering all departments within the canteen, the buying of raw materials, stock control and stores issues, the avoidance of waste and a rigid check on all cash returns. The prices charged in canteens are necessarily reduced to the minimum and any leakage in these departments may result not only in serious financial loss, but in a deterioration in the quality of the food and the variety offered to the factory employees.

Thirdly, there is the necessity for a policy and guidance to be given to the canteen management. The rapid development of industrial catering during the twentieth century has been shown and it is therefore vitally necessary that the canteen may be controlled by a specialist and expert who can visit other units, who has vision and foresight and who is able to direct the canteen management regarding variety of meals and offer suggestions regarding light, equipment and service. Such guidance is absolutely necessary if the standard already reached by industrial canteens is to be maintained and improved.

It is suggested that a canteen committee of the workers is a useful go-between and safety valve for any dissatisfaction, whether the firm runs its own canteen or employs a contractor. This Committee as the Industrial Welfare Society suggests may be a sub-committee of the Works Council, or elected directly, from the different departments and can explain the needs of the workers, transmit and help to investigate complaints and suggestions regarding service, dishes liked or disliked, cooking prices, portions, etc., and convey to employees the reasons for meeting or refusing requests. It may usefully co-operate with the manager if there are recreational activities to be catered for and deal with cases of untidiness, unpleasant behaviour or wilful damage in the canteen. The existence of a committee may also give the employees an interest, and a sense of proprietorship, in the canteen, and faith in the disinterestedness of the firm in establishing it.

Feeding the Miner

Some canteens are under the supervision of the Welfare Department of the firm, one of the advantages of which is the provision of special services for juveniles, as well as an effective link-up with other welfare activities. Where the canteen is run as a separate entity, however, this can often be effected by a close liaison between the welfare officer and the canteen manager.

In the meantime, the Ministry of Labour had set up a special section of their Factory Inspection Department to supervise and give advice on the establishment and adaption of factory canteens resulting from the canteens order of 1940 already referred to which made it compulsory for every firm in the country employing over 250 operatives to provide a suitable canteen where hot meals could be purchased. This canteen department set up as part of the special welfare department of the Ministry of Labour under the Emergency Powers Act (Statutory Rules and Orders, 1940, No. 1943) was of tremendous value to industry and particularly to smaller firms in the establishment of statutory canteens. Another government action which proved of the greatest benefit when once the canteens were established was the setting up by the Ministry of Food of a panel of nutrition experts and catering advisors to help canteen managers on questions such as planning menus, obtaining food supplies and making the best possible use of restricted rations.

FEEDING THE MINER

Further government action was exemplified in a clause in the Essential Works Order Act of 1941 whereby the Ministry of Labour was put under obligation to satisfy itself that men who were compulsorily bound to work in collieries should be provided with suitable welfare facilities including canteens. Resulting from this Order, the Miners' Welfare Commission (established in 1920, to promote general welfare among workers in the coal industry) was approached by the Secretary for Mines to work out a practical scheme for establishing canteens for miners. The story of this is sufficiently interesting to warrant it being given in some detail. A suggestion that mineworkers should be given extra rations for consumption in the home, had been

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rejected on grounds of policy, so the only alternative, in order to ensure that miners obtained the necessary extra nourishment for their work, was to establish canteens at the pit-head, where food could be provided on a sufficiently generous scale. The commission set to work at once to canvass the collieries in order to discover the best method of winning the support of miners and management. In September 1941, a full-scale programme of canteen establishment was launched throughout the coal industry. The Commission was determined at the outset to make no attempt to force upon miners something which they did not want. Research revealed that food requirements fell roughly into three categories: (1) 'Snaps'—or food packets made up at the pit-head and taken below ground for consumption in the pit; (2) 'Snacks'—or light meals of sandwiches, pies, etc., eaten in the canteen either before or after going to work; and (3) Full Meals consisting of meat and two vegetables and served above ground in the canteen after work.

It was decided that canteens should be managed by joint councils of employers and employees as non-profit making concerns.

The Commission worked out a comprehensive plan for different sized canteens based on the numbers employed in the largest shift at each locality. Altogether seven categories of canteen were enumerated, varying from a clientele of between 50 and 100 up to one of between 1,201 and 1,600. The work was put in hand through the Commission's District Welfare Organizers in collaboration with its Divisional Architects. Wide powers were conferred upon these officers to eliminate delays due to 'red tape' and within a comparatively short time canteens were established in round about 90 per cent of collieries throughout the country employing fifty operatives or over. The statutory obligation to provide canteens was placed by the Government on the owners of the mines and the Commission offered all possible assistance to the collieries in putting the work in hand. Altogether some £2,600,000 was spent on canteen establishment throughout the coal-mining industry. At its peak, the turnover was reckoned at about £5,000,000 per year. The Ministry of Food gave the fullest possible co-operation and

Finance and Organizations

meals were planned according to the suggestions of its extensive staff of war-time meals' advisors. About a thousand collieries were involved in the scheme which proved a great success and helped considerably to keep up the essential war-time production of coal.

FINANCE AND ORGANIZATION

While the main obligation to provide canteens lay with the owners, grants were made in certain cases from the Miners' Welfare Fund for the purpose of establishments. About 350 canteens were also established in connection with pit-head baths financed out of Pit-head Baths Trusts.

The businesslike way in which the whole question was tackled is typified by the following memorandum on Policy issued by the Miners' Welfare Commission on 13th August 1941:

COLLIERY CANTEENS

Determination of policy in regard to the type of Canteen to be established

The types of canteens now, or being established in the main.

1. Canteens for distributing prepared foods for consumption underground.
2. Canteens serving prepared foods for consumption underground, and cooked or prepared foods for consumption in the canteen.
3. Full Service Canteens serving sit-down meals.

Reference to the progress chart submitted to the Commission will indicate the number and in which districts the various types of canteens have been or are being established.

The general policy hitherto pursued has been to seek colliery companies to adapt premises to allow of the immediate or early distribution of prepared foods for consumption underground and to allow development to extended service to mature in accordance with demand and availability of premises. The main exception in the pursuance of this policy have been W. Yorkshire, and to a lesser degree of S. Yorkshire and Nottingham where a few full-service canteens have been established as a first development.

Grants now being available from Baths Fund effects a change in one of the governing factors, an important factor which has operated to limit type of canteen to be established, namely the cost to the

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Colliery Company. An attempt is made hereunder to reconcile the various governing factors now obtaining in order to determine a definite line of policy so as to obtain maximum results. The governing factors are:

- (a) Demand.
- (b) Conforming to a reasonable standard of service.
- (c) Maximum utilization of available rationed and unrationed foods.
- (d) Purchase price of food to the consumer.
- (e) Availability of:
 - (i) Existing premises for adaptation.
 - (ii) Labour and materials for new buildings.
 - (iii) Kitchen and service equipment.
- (f) Availability of staff.

Examination of these factors and of a cross section of opinion in the districts generally appears to indicate that the best results will be obtained by seeking the establishment of Service 2 Canteen. Canteens in this category contain all the elements to a lesser or greater degree of Service 1 and 3 Canteens.

A description of a typical Service 2 Canteen is given hereunder and a plan shewing the subject is on the table.

The plan designed for a colliery of average size, i.e. employing 650 men with a largest shift of 400. Of the 400 men it is assumed that one-third will be in the canteen at one time and of that number two-thirds will require snacks to be taken in the canteen or sit-down meals. The remaining one-third will probably be made up of casual customers or those who require only snaps to take underground.

The principle is to provide accommodation which is flexible and easily adapted to the needs for each type of service or for the predominating demand for any one type of service.

A scheme of this type can reasonably meet the demand likely to be made, will provide a reasonable standard of service, allow the distribution of a full range of rationed and unrationed foods and will cater for individual requirements.

The typical plan is designed as a new building but it illustrates the planning principle which would also apply to the adaptation of existing premises and the sale of the accommodation while it provides for the various forms in which food might be served, is such that it would be more readily applied to an existing building than a full service canteen.

Having regard to the restriction on labour and materials the adoption of the type of canteen proposed would ensure an even distribution of available materials so that one district would not suffer at the expense of another.

Underground Feeding of the Miner

Experience appears to indicate that it is important to adopt a definite national standard. An empirical formula is necessary as a basis of formulating size and equipment but it can be modified if necessary in the light of further practical experience of the canteens in operation.

Detailed instructions were also issued to the Commission's District Organizers (see Appendix).

In certain circumstances, the employment of Catering Contractors was authorized and instructions were issued as to the nature of the contract to be entered into. In the larger collieries, particularly those in South Yorkshire, where numbers up to 4,000 required feeding, it was often found to be more economical and efficient to employ a contractor. The services of contractors where employed, were found to be extremely good.

A memorandum on the planning and construction of pit-head canteens was issued by the Commission in September 1941 which contained some useful constructional hints and suggestions, which are given later (see Appendix).

UNDERGROUND FEEDING OF THE MINER

Late in 1941 an experiment was tried at the suggestion of Sir David Robertson (then Mr. David Robertson, M.P.) for the provision of hot meals to miners underground. Unfortunately the experiment was not, on the whole, successful, but some useful information was gained by it, and it is worth recording as a courageous attempt to solve a long-standing problem. Though the Miners' Welfare Commission did not itself take any responsibility for this experiment it gave all reasonable assistance.

It was argued by the supporters of the scheme that supplementary food in the form of a full balanced meal taken in the middle of the shift gave a better return in output than a similar meal or a snack taken at the end of the shift, that fewer men would stay at the colliery after work for meals as a result and that a better ration than sandwiches and pies would be provided for mid-shift consumption. Mr. Robertson stated that in other industries an increase of output had resulted from the provision of a hot meal in the middle of the shift. It appears that Professor Collis and another medical expert consulted, expressed the opinion

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that miners should not suffer ill-effects from taking full meals underground.

In the report on the question by the Miners' Welfare Commission it was suggested that this argument should be considered particularly in relation to the coal-face workers (perhaps some 20 per cent of the total employed) who were the heavy workers of the industry and the keymen from the production point of view. It was this class of men in the Commission's view whose requirements should probably be studied before all others. The Commission's report went on to state that: 'Production was affected by a variety of factors operating at the same time and that a reliable estimate of the reason for any rise or fall could not be attributed to any one particular factor without careful investigation of this complex problem as a whole over a sufficient period.' The official production figures at Easthouses were quoted as having shewn no tendency to increase the introduction of meals underground.

Mr. Robertson had asserted that miners suffered from stomach troubles to an abnormal degree, and that this was due to unsuitable feeding while at work. . . . Mr. Robertson also claimed that his plan would be cheaper and use less building labour and materials than the ordinary canteen system.

In the experiments carried out the food was supplied in bulk thermos containers and served out on the spot. The report of an official visit by representatives of the Miners' Welfare Commission and others to one of the collieries where the experiment was being carried out gives a good description of the scheme in action. Eventually, however, it was decided that the idea was not practicable. The miner, it was realized, is a conservative individual and innovations in his habits are hard to establish. Conditions underground, it was felt, are not, on the whole, suitable to taking meals. The idea was finally abandoned and concentration continued on the pit-head canteen system. Extracts from the visit report mentioned give some idea of what was attempted.

The visit was made to a colliery in Midlothian on 5th November 1941. The reason for the visit was given as being 'To seek information on underground feeding experiment'. The action

Underground Feeding of the Miner

recommended was 'the provision of extended canteen premises to afford better kitchen and storage space and facilities for taking sit-down meals on the premises'. It was made clear that the Commission regarded the experiment with interest and open minds. The numbers employed at this colliery at the date of the visit were: Underground 380; Surface 47.

Entry to the underground workings was by means of a surface slant, the main slant being approximately 1,450 yards long and from thence a main haulage road travelled into the working districts and to subsidiary haulage roads. Man carriages were provided on the main slant and main haulage road. Conditions generally were described as good with main roads approximately 12 ft. by 9 ft., the temperature approximately 70 degrees F., and a good atmosphere.

The existing canteen, which was primarily designed for a 'snap' service, opened on September 2nd and continued serving 'snaps' until October 15th. The underground feeding experiment was put into operation on Thursday, October 16th.

It was agreed that the party should proceed firstly underground. A district 2,300 yards from the foot of the main slant along two haulage roadways was visited and conditions found to be average with temperatures approximately 68 degrees F. with clear atmosphere and good conditions.

The height of the seam worked was 5 ft. 3 in. average, the coal was cut by hand and loaded on to a double unit conveyor delivering to a main gate. The face and oncost workers congregate at the main gate for their mid-shaft meal.

About seventeen men were taking their meal at the time of the visit; of that number five were partaking of sandwiches which they had obtained from home and the remainder were partaking of the hot meal provided by the colliery canteen.

The hot meal provided consisted of meat, two vegetables, and a sweet, with a flask of tea, and the men present stated they were satisfied as to the condition of the food which was delivered in bulk, and apportioned by one of the number. The bulk containers used were of War Office type holding five to eleven receptacles. Plates, knives and forks were included.

Of the five men not taking the meal one was of advanced

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years and stated he would not consider changing his habit, two preferred 'snap', one would not advance any reason and one stated that he had not partaken of the daily meal for some time owing to digestion trouble. On being questioned he admitted that he had previously suffered from stomach trouble.

An informal discussion took place with the men taking the meal who all voted it a 'good thing', but several expressed the opinion that they would rather take a normal mid-shift meal of sandwiches—bread and jam for preference—and have a good meal in the canteen at the finish of their shift. The kind of food generally taken in the pit in pre-war days was bread, butter, jam and some cheese.

Bulk-food containers were loaded on the transport approximately two hours before the time of the mid-shift meal. The mine manager stated that no additional personnel was detailed to handle the containers and that transport and delivery were carried through in the normal manner by oncost personnel and entailed no inconvenience or disturbance to working conditions.

It was understood that three individual containers were being experimented with but as these were in another district in the mine they could not be examined.

The provision of miners' canteens was subsequently taken over by the Ministry of Fuel and Power and future development therefore lies in their hands. The Miners' Welfare Commission however, have a valuable record of service to their credit at a time when coal output was essential to our survival as a nation, and the work they did in face of great difficulties will always remain as an invaluable contribution to the industrial effort of this country in time of war. Opinions among experts seem to differ widely as to the value of the provision of hot meals at pit-head canteens for the miner returning from work. There is, however, little doubt that the provision of 'snaps' and 'snacks' is popular and necessary. It is reckoned by the Commission that, of the 82 per cent of miners who make use of pit-head canteens, about 29 per cent take full meals, 30 per cent take snacks and 23 per cent buy 'snaps' to take down with them to their work. The cost of a full meal is 1s. to 1s. 3d. Snaps, consisting of two

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full rounds of sandwiches (and a beaker of tea in many cases) cost 6d. One night a week miners are permitted to bring their wives or families to the canteen.

Some interesting figures supplied by the Miners' Welfare Commission show that at the 30th June 1946 the number of collieries with canteens providing hot meals was 570 catering for 510,721 wage-earners. Collieries with snap and snack canteens numbered 339 and catered for 180,335 wage-earners. Weekly figures of meals served at 6th October 1945 were 4,222,000, of which 18·8 per cent were snap meals, 65 per cent snacks and 16·2 per cent full meals. The number of meals served per head per week were 6·1.

As long as rationing continues it is obviously essential that facilities should be provided for the miner to obtain the additional nourishment required for the peculiarly exhausting conditions of his work. To give the miner's family a higher scale of rations is no guarantee that the miner himself gets the full benefit from it and would be unfair to the families of workers in other industries. It is the miner as an individual who needs extra nourishment and some form of canteen appears to be the only channel for supplying him with it. Nevertheless, prejudice and conservatism are strong in the mining industry and the average married miner can easily be understood to prefer, when his spell underground is over, to return to his wife and family for a meal than remain behind to eat, however attractive the food and service. Moreover, a certain interval is required for recovery after arduous work before the human organism is ready to digest a heavy meal with full efficiency. Another point to be considered is that where miners have any distance to travel between home and pit and where transport is restricted, to stay for a meal may involve missing a bus or train.

There is little doubt, however, that the work towards the permanent establishment of canteens which has been done during the war years will not be wasted, but will bear fruit in one direction or another for the lasting benefit of those engaged in the industry. It may well be that the future development and expansion of coal production which at the moment is becoming such an acute problem to the nation as a whole, with its con-

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comitant problem of recruitment of workers for the mines, may be strongly affected by the decisions which are made in the immediate future as to the policy with regard to canteen establishment and organization.

CATERING TRADE EMPLOYMENT

It now becomes necessary to say something about the conditions of employment of those engaged in this rapidly growing industry of industrial catering. Until 1942, employees in industrial canteens were looked upon as domestic workers and therefore exempt from any form of wage control. In February of that year, however, took place the first meeting of a Joint Industrial Council for the Catering Trade. At this meeting there were five representatives of catering employers and seven representatives of employees. This meeting was the outcome of the activities of an association of Industrial Catering Employers formed in December 1941 under the name of the National Society of Caterers to Industry. From its inception this society was in close touch with the Ministry of Food and also the Ministry of Labour. Two important Trades Unions were represented on the Joint Industrial Council, namely the National Union of General and Municipal Workers and the National Union of Distributive and Allied Workers. The importance of the rates of pay and conditions of work finally agreed upon in the Council's Memorandum, dated 20th July 1942, is that they became the basis for the Catering Wages Bill of December of the same year which embodied the main findings of the Industrial Council in legislation which finally set up a central Wages Board for the Catering Industry in 1945. The work of the industrial council, bearing ultimate fruit in somewhat belated legislation, did much to stabilize the position with regard to employment in industrial canteens and, by fixing definite rates of pay and conditions of work, to attract a higher standard of worker and so improve the standard of service all round.

HOT SPRINGS FOOD CONFERENCE

Meanwhile, in 1943, an announcement of world-wide importance had been made at the Hot Springs United Nations'

Hot Springs Food Conference

Conference on the Food Requirements of the Nations, and it was laid down as axiomatic that all industrial workers should be given full opportunities of obtaining a third of the total daily calories required for maintaining health and efficiency in their respective employment at their midday meal. This, as we have seen, was a confirmation of the opinion expressed by Dr. Collis and Dr. Greenwood in their report on 'The Health of the Industrial Worker' in 1921. It constituted, however, a direct and official recommendation to employers throughout the world to take steps to ensure that adequate nourishment was provided at the place of work for every industrial worker both male and female.

The Hot Springs Conference, by focusing attention on the whole vexed subject of Food and Nutrition, did much to clarify existing ideas about Feeding and Food Distribution and to stimulate interest and point the way to new developments in the future. As we have seen, great strides have been made in the science of nutrition during the 1930's; these were typified by the Report of the Committee of the British Medical Association in 1933 appointed to 'determine the minimum weekly expenditure on foodstuffs which must be incurred by families of varying size if health and working capacity are to be maintained'. The Bureau of Home Economics of the United States Department of Agriculture issued a more detailed report of Food Requirements during the same year. The American Report set up the first standard to take into account the full amounts of vitamins and minerals required for health. It was known as the 'Stiebling' standard. In 1935 a standard for mothers, children, and adolescents was drawn up by an International Committee of the League of Nations. This report was approved by the National Committee on Nutrition set up by the British Government in 1937 under which had been established the Medical Research Council. The United States took further action in 1940 when they set up a Committee on Food and Nutrition which reviewed the whole question of food requirements and issued a statement of the amounts of nutriment which were needed for health. Finally, in 1941, the U.S. National Research Council laid down a table of daily allowances which is to-day looked upon as the

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most complete and authoritative statement so far made. According to this table the requirements of individuals per day are as follows:

	<i>Calories</i>	<i>Protein</i> <i>grammes</i>	<i>Calcium</i> <i>grammes</i>	<i>Iron</i> <i>mg.</i>	<i>Vit. A</i> <i>Inter-</i> <i>national</i> <i>Units</i>	<i>Vit. B</i> <i>mg.</i>	<i>Vit. C</i> <i>mg.</i>
Male							
Sedentary							
Worker	2500	708	0.8	12	5000	1.5	75
Male Heavy							
Worker	4500	70	0.8	12	5000	2.3	75
Nursing							
Mother	3000	100	2.0	15	8000	2.3	150
Boy							
10-12 years	2500	70	1.2	12	4500	1.2	75
Child							
1-3 years	1200	40	1.0	7	2000	0.6	35

Realization of these facts of food requirements for the people of these islands drove the government to take action to see that in times of restricted diet due to war emergencies all possible opportunities should be given to the general public to obtain sufficient nutritious and well-prepared food. It was as the result of this that the Ministry of Food started the widespread movement for the establishment of 'British Restaurants' throughout the country in towns where it was felt that the population would benefit by them. On 15th November 1940 the Ministry of Food issued a circular to Local Authorities stating that the Ministry would reimburse these authorities for all approved capital expenditure on the equipment of Community Feeding Centres or 'British Restaurants' as they were officially called. The Centres were to be run on a fully self-supporting basis but certain unavoidable losses would be made good by the Ministry. Further provisions were also made for the establishment of School Canteens for evacuated children, the extension of School Dining Centres and for facilities for the emergency feeding of displaced persons and others. A pamphlet issued in June 1941 under government authority by the Women's Voluntary Services for Civil Defence entitled 'Community Feeding in War-Time' sets out in full the principles to be followed in setting up these various forms of feeding centres. It deals with the question of Mobile Canteens, which proved of enormous value in 'blitzed

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areas', Co-ordination of Voluntary Organizations, Premises and Equipment, Administration and a host of other useful subjects, and proved of the greatest value to local bodies undertaking this very necessary work. In her foreword to the book, Lady Reading stated that in the emergency in which the country found itself 'the importance of scientific catering cannot be too strongly emphasized'.

Among other bodies which did important and valuable work at this time and which are still providing excellent service must be mentioned the Industrial Catering Association, a body composed of canteen managers in factories which run their own canteens, and the Empire Tea Bureau which brought out several useful handbooks on tea distribution to workers under the title of *Tea for the Workers*. These handbooks did much to popularize the system of supplying tea by a fleet of trolleys to workers as they worked. The effect on morale was remarkable. A special ration of tea was issued to factories, and it was imperative that efficient methods should be devised for its distribution to the workers. In addition to the trolley system or as an alternative to it, 'tea points' and tea bars were instituted at a number of factories which proved of the greatest benefit.

Finally, in 1945, the Scientific Advisers' Division of the Ministry of Food published a *Manual of Nutrition* containing invaluable information on the nutritional values of various foods which was an excellent summary of the knowledge gleaned on the subject in the intervening years, set out simply and clearly for the study of those in charge of catering services in both industry and the community as a whole. The value of knowledge of nutrition has now become fully recognized and at least one large industrial catering firm had gone to the expense of setting up its own nutritional research unit under a fully qualified staff of experts, which sent round a mobile laboratory to canteens scattered all over the country to analyse the meals being actually served at its own canteens in order to ensure that they contained the necessary nutritional ingredients.

This company brought out a survey of the findings of their research unit which was published in the autumn of 1944, from which the following extracts are taken:

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'Problems of cooking, preserving, and serving foods with the greatest possible conservation of their nutritional content, and extensive investigation of the composition of foods is a constant task of this laboratory. This research department, working on correct dietetic principles, also advises regarding the planning of menus for meals which are palatable and satisfying, and at the same time supply the proper amounts of all the vital food factors. That these meals are actually served as designed, is checked by analysis of sample meals taken from the various canteens operated by the company throughout the country. The results of the nutrition surveys so obtained are complementary to those carried out by many university laboratories at communal feeding centres in a nation-wide survey.

'The department is constantly seeking to improve methods of cooking, preserving and serving those foods which contain the more unstable food factors, such as Vitamin C, an investigation in which success means a considerable increase in the availability of these factors.

'During the twelve months ended 31st May 1944, a small number of canteens operated by the company were selected and surveyed. This survey covered 90 units of varying types and sizes. Most of the canteens were of the category B type, but some category A and C were included.

'Category A canteens with the largest food allowances are for heavy manual workers. B canteens with smaller meat allowances are for moderately active workers, whilst C canteens for sedentary workers have smaller food allowances identical with British Restaurants and normal catering establishments.

'With the advent of more wives and mothers into industry, the midday meal served in canteens has become the main meal of the day for a large section of the community. This makes it more essential than ever that nutritious, well-balanced meals be served. Due to the conditions peculiar to mass cooking, canteen meals may be deficient in one or more of the essential nutriments. It was to assess the nutritional value of such meals and to advise canteen managements of ways by which any deficiencies may be corrected, that this survey was carried out.

'A van was fitted as a mobile laboratory, equipped to carry



20. Preparing tea trolleys for a mid-morning break



21. Tea trolleys about to start through the works



22. Tea trolleys about to serve tea and cakes at mid-morning break

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out our estimations of Vitamin C at canteens far distant from the laboratory. Meals were obtained from the counter as they were being served. The vegetables were weighed and small samples (5 gm.) dropped into a tared bottle containing 10 ml. of 2·5 per cent metophosphoric-5 per cent sulphuric acid mixture. The analysis of Vitamin C was carried out the same afternoon by direct titration with indophenol, by the method of Harris and Olliver (1942). The remainder of the meal was placed in a glass jar for transport to the laboratory at Oxford. The meal was dried on a water-bath and protein estimated by Kjeldahl's method, fat by Soxhlet's and calcium and iron by the methods of Godden (1937). The carbohydrate was calculated by subtracting from the dry weight the protein, fat and ash contents.

'For purposes of this survey meals were collected from each canteen for four or five days and the daily average for the week calculated. The object of examining the meals for four or five days was (a) to study the variety of meals served; (b) to overcome any temporary difficulties such as supply of food, shortage of staff or equipment; and (c) to avoid specially prepared meals. For most nutriments a daily optimum intake is not necessary, provided the weekly average is adequate. Meals consisting of a meat course and sweet were examined as this was the most popular meal. Although soup is available in most canteens, three-course meals including soup are not very popular in the South of England. The popular demand is for additional sweets.

'In general, it was found that meals which appealed most to the eye and to the palate were those which had good Vitamin C content, but these criteria were not always such a reliable guide to the other nutriments. Most canteen meals consisted of a joint, fish or meat dishes with potatoes and another vegetable, usually cabbage, but carrots, swedes, turnips, green peas, and runner beans and dried peas and beans were given according to season. Dehydrated vegetables were only used occasionally. At some canteens a third vegetable, often carrots, was given. With fish and chips there was a general reluctance to accept a second vegetable, but in view of the high Vitamin C content of

Inter-War and Second War

chips and the high protein content of fish, this is perhaps not so important.

'It was shown that there is very little difference between the protein content of category A and B canteen meals in spite of the bigger meat allowance in A canteens. This is because a higher percentage of joints and stews were served in category A canteens than in category B canteens, where made-up dishes, e.g. toad-in-the-hole, cottage pie, rissoles, or sausages were served. Made-up dishes, besides being 'meat extenders', frequently contained dried egg, soya flour and pastry.

'Meatless and cheese dishes were only occasionally served in the canteens examined, but cheese rolls and sandwiches were popular snacks. Made-up dishes not only increase the protein, but also the fat, carbohydrate, calories and sometimes the calcium. For this reason salads become satisfying meals when they contain a substantial portion of a made-up dish. The maximum figures, except Vitamin C and calcium for canteens 2, 5, 17, 21, 23 and 26 were all on days when made-up dishes were served, whilst those at canteens 1, 18, 25, 28 and 35 were all on days when fish was served. At canteens 1, 2, 3, 6, 9, 10, 12, 14, 20 and 39, the minimum values for protein fat, carbohydrates and calories were all on days on which joints were served. The same principles apply to the category C canteens 8 and 30 whose meat allowance is only half that of the A canteens.

'The fat content of the meal was dependent on (a) the sweet (rice pudding, prunes, and stewed fruit, all having a very low fat content); (b) the frequency with which fried foods were served, e.g. fried fish, chips and, to a lesser extent, roast potatoes. The maximum fat content at canteens 25, 35, 38, 62 and 76 resulted from a combination of fried foods and a steam pudding. Injudicious selection of menus is illustrated by the very low fat content of the minimum values at canteens 36, where stewed rabbit, mashed potatoes and cabbage were served with rice pudding.

'As reported by Widdowson and McCance (1943) the calcium content was found to depend directly on the hardness of the water. Compare canteens in London (hard water) and Birmingham (moderately soft water). The calcium content of

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meals containing rice pudding was frequently found to be low, e.g. minimum values at canteens 14, 19, 22, 36, 39. This is due to the limited amount of milk available for these sweets.

'The Vitamin C content of the meals was dependent on a number of factors: (1) the type of cooked potatoes served, mashed being much poorer than boiled, roast or chips. Jenkins (1943) has also reported the destruction of Vitamin C when potatoes were mashed; (2) the age of the potatoes, a marked increase being noticed when new potatoes were available in July; (3) the frequency of cabbage in the menu; (4) the variety of cabbage, spring and autumn cabbage being superior to summer cabbage; (5) the losses in cooking and storing of the meals in the hot-closet. The Vitamin C content in cabbage and swedes is especially susceptible to these last two factors. This resulted in very low figures in some canteens, whereas in other canteens where more care was taken and/or cooking conditions were more favourable, quite high figures were obtained. Salads were found to be rather poorer in Vitamin C unless accompanied by large helpings of potatoes. This is because lettuce is a relatively poor source of Vitamin C and because of its great bulk which only allows of small weights being served.

'The target figures taken for each meal are 30 gm. protein, 30 gm. fat, 150 gm. carbohydrates, 1,000 calories, 300 mg. calcium and 30 mg. Vitamin C. The figures for protein, calcium and Vitamin C are slightly higher than one-third of the daily recommended dietary allowances of the National Research Council (1943). A few canteens did exceed the target figure, but many of the canteens were deficient in carbohydrate and hence calories. Several factors contributed to this: (1) only two-course meals were considered, and (2) the addition in extra helpings of potatoes which were supplied in some canteens were not included. Because of the bulk of the large amount of potatoes, excluding chips, which would have to be included in some meals to give 1,000 calories, many people would find such a meal too much to eat. The protein and fat content of the meal is governed by rationing, but in some canteens the fat content of the meal might well be improved.

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'The nutritional superiority of made-up dishes compared with joints is undisputed and their more frequent appearance in canteen meals strongly urged, but these made-up dishes should contain substantial portions of meat, dried egg, cheese or soya flour.

'The importance of fresh supplies of green vegetables has been shown by Chappell (1943) and the necessity for rigorous cooking conditions of cabbage by Macrae (1942) in order to obtain the maximum Vitamin C content. The Vitamin C content of canteen meals depends almost entirely on the size of portions and the quality of the potatoes and cabbage. During the summer months the target figure of 30 mg. of Vitamin C was easily attained because of the high Vitamin C content of the potatoes, but as the age of the potatoes increased their vitamin C content fell. This, however, is offset by the higher Vitamin C content of spring and autumn cabbages.

CANTEENS IN 1945

The position of industrial canteens at the end of the war is admirably summed up by Miss D. Johnson, Superintending Inspector of Canteens to the Ministry of Labour's Factory Inspectors Department, in her last two reports. In 1944, she wrote, referring to the previous year: 'Reports from all inspectors and factory canteen advisers confirm that this has been a year of steady progress in the development of canteens, principally in the standard of food and services given. New canteens have been started during the year both in large and small factories, but the main emphasis is no longer on new canteens, in the large factories at any rate, but on improving existing ones. Some reports note that there is now arising a healthy competitive spirit among firms in the same district in efforts to provide something better than their neighbours.

'The scope of the legal requirements regarding canteens in large factories was extended during the year by the making of the Factories (Canteens) Order 1943 revoking the Factories (Canteens) Order 1940.

'The two main effects of the new Order have been:

'(a) To include within its scope factories of a type connected



23. A small canteen kitchen serving 350 meals a day



24. A Midlands kitchen serving 500—750 meals a day



25. Canteen kitchen in the Midlands which serves
1,000 meals a day



26. A canteen kitchen serving 1,500 meals a day

Canteens in 1945

rather with civilian needs than with the manufacture of munitions.

(b) To strengthen the legal position in relation to the actual standard of services maintained as distinct from the mere provision of a building and equipment.

In so far as it applies to a greater number of factories, some divisions report that it has caused little change in the existing position, since many had already set up canteens voluntarily, but elsewhere, particularly where there is an industrial concentration of a type connected rather with civilian needs than with the manufacture of munitions, the effect of the Order has been to include within its scope a substantial number of new factories in industries such as brewing, printing, paper making, laundering, and clothing. In one district thirty-six factories not hitherto affected were brought within the scope of the Order.

The main effect of the Order has been that its comprehensiveness has helped the inspectorate greatly in persuading occupiers to raise the standards in their canteens, and has focused attention on the many details implied in the term "suitable canteen".

As soon as the Order was made, district inspectors and factory canteen advisers received inquiries from numerous firms who wanted to be sure that their canteens were fulfilling the Order's requirements. In general, firms have shown a willing spirit of co-operation, and have carried into effect the technical advice given by the department's advisers. The general opinion is that the provisions of the Order have been helpful to the department in obtaining improvements not only in the food but also in storage, standard of service, methods of tea-making, and in kitchen and dining-room equipment.

Although the 1943 Order had only a limited effect on the number of canteens to be set up in the larger factories, the year has shown a steady increase in the number of canteens functioning in all types of premises subject to the Factories Act. Numerical increases are apparent from the following comparative table:

Inter-War and Second War

	<i>December</i> 1942	<i>December</i> 1943
(a) Factories employing over 250, with canteens	4,340	4,873
(b) Factories employing under 250, with canteens	4,141	5,704
Total factories with canteens	8,481	10,577
(c) Docks	160	176
(d) Building sites	868	782

‘In addition, at the end of 1943, 330 places were known to have canteens in preparation.’

Miss Johnson draws attention to the increase of canteens in small factories as shown by the table quoted. The percentage increase of such small factory canteens over the 1943 figures amounts to 37·7 per cent. ‘This represents a very satisfactory indication of the real attitude towards canteens to-day’, says Miss Johnson, ‘quite apart from any actual obligation to provide them. It suggests that both workers and employers are increasingly recognizing the value of a canteen as an integral part of the factory organization.’ In fact, it appears that workers at small factories are beginning to demand canteens as part of their rights and are envious of large factories for possessing them. A review of six such factories in East Lancashire disclosed that none was serving less than 50 per cent of the employees and three were serving between 75 and 90 per cent.

Miss Johnson also reports a great increase in the general subject of nutrition. It is no longer a question of getting the workers fed but of making the best possible use of the rations available, and serving them attractively as possible. In this the twenty-seven factory canteen advisers operating for the Ministry of Food were of the greatest value.

Other important services which are stated by Miss Johnson to be increasing are the supply of snacks, sandwiches, cakes, rolls, etc., with tea or coffee; the greater attention paid to special diet for those suffering from gastric troubles; the supply of special cheap meals of high nutritional value to juveniles, and the supply of meals to night workers.

In her reports for the year 1944, published in 1945, Miss

Canteens in 1945

Johnson describes a continuation of the good progress reported the year before. She notes the increase of attention paid to the use of attractive colour decorations, mural painting and paneling to increase the cheerfulness of dining-rooms. She gives figures showing a further increase of 373 canteens in factories employing over 250 and 880 in those employing less.

Chapter X

THE FUTURE OF INDUSTRIAL CANTEENS

THE OPPORTUNITY FOR CAPITALISM

We have seen how the industrial canteen idea, stimulated by the needs of the 1914 war, flourished for a time and then languished due to apathy and lack of enterprise on the part of management, caterers and personnel. Will the same thing happen again, now the second world war is over? It will unless drastic and conscious steps are taken to prevent it happening and unless canteens are seen in proper proportion as centres of community activity. To-day there is a great opportunity for enlightened employers to lay the foundations of lasting monuments to those who have given all in the service of freedom. To-day we are looking forward to a new and better world for everyone and surely that world should begin in the factory where men and women are earning their bread and butter and where they spend the greater part of their working lives.

We have seen how, in the past, the employer looked upon it as his responsibility—and the community enforced his recognition of that responsibility—to feed, house and clothe his employee in conformity with a decent standard. We have seen how the powers of irresponsible greed stifled that sense of responsibility and allowed the most horrible abuses to crop up—abuses of which no Englishman can fail to be ashamed to-day. Now is the time to make amends and to ensure that the working man

Progressive Examples

and woman of the future shall have all the amenities which are economically practicable to make his working and leisure hours as happy and comfortable as possible. Here, surely, is the opportunity for capitalistic enterprise to prove that it is not mere selfishness and money-grubbing but a constructive progressive force for the benefit not merely of the privileged few but of the industrial community as a whole.

We have seen the value of the community centre as a health promoting and educative factor in social life. What more natural starting point presents itself than the factory where the majority of people work, for an extension of the community centre idea? And what more obvious nucleus presents itself for co-ordinating the activities of such centres than the factory canteen? Here, then, lies the pointer to the future. Already many firms have grasped its significance and established fine medical and therapeutic units all grouped round magnificent restaurants and well-equipped kitchens. This, then, should be our ideal for the future—to work until every factory has well-equipped, well-planned canteens and kitchens, run by experts who know their job not only in the cooking and presentation of food but in the choice of food and balance of menus to provide the maximum nutritional value—and to make such canteens the centres of an ever widening network of social and community activities, welfare facilities, and personal services. Let us give an example from actual observation of a well-known firm of North Country multiple tailors already referred to.

PROGRESSIVE EXAMPLES

This firm was founded in 1900. In an interesting little booklet or 'Works Guide', a copy of which is presented to every employee on joining the firm, a brief résumé is given of the ideals on which the firm is founded. This booklet starts with a welcome to the employee and goes on with a section headed 'The Methods of Yesterday'. This shows courage and imagination, for the section amounts to an indictment of the 'sweating' system in practice even at the time the firm was founded. 'At the beginning of the present century', says the booklet, 'one of the black spots of the Industrial System was the Sweating Den

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where Clothing was produced. The spreading of the system led to the appointment of a committee on sweating by the House of Lords, and the introduction of legislation to suppress this form of industrial slavery. When the report was published, it was shown that there were thousands of small workshops employing people in basements, attics, and other unsuitable premises, lacking in proper lighting, ventilation and sanitary arrangements. Women were paid twopence an hour and their wages ranged from five to ten shillings per week. Men received sixpence an hour' . . . and so, until the whole grisly picture is painted for the new recruit to the industry. In contrast, the booklet goes on to show how "instead" of a thousand dens each employing ten people, there is one daylight factory for ten thousand. . . . 'Right from the outset welfare work has occupied a prominent place in the firm's activities.'

This firm is justifiably proud, not only of its achievement in industry, but also of its record of welfare activities.

Nobody would deny, least of all a progressive firm such as this, that the prestige value is great, but surely the point lies in the result. 'By their fruits ye shall know them.' Here we have ten thousand happy, healthy, contented operatives, performing the essential public service of providing clothes at reasonable prices for the male population of our islands. The factory is well run and efficient, and human needs are catered for. Nobody denies that profits have been made, larger than those of firms less well-equipped with welfare facilities and based on less humanitarian principles. The very making of these profits has enabled the welfare activities to be increased, they, in their turn, have added to the reputation of the firm.

From the outset the firm aimed at showing that the bad old methods were not only inhuman but unbusinesslike. There has never been any compromise with evil. A clean sweep has been made and it has paid hands down. Can anybody find any criticism? Those who wish to see the capitalist system abolished altogether dislike such examples of really enlightened private enterprise, because they prove that capitalism can work in the hands of intelligent and public-spirited men, whereas they want to prove that capitalism cannot work and must therefore be

Progressive Examples

superseded by collective ownership. There is no need here to enter into this tangled controversy, but a plea must be made for fairness and clear-thinking in this issue. Capital and labour are not opposed in purposes. Both are working ultimately for the common welfare. It is only where a purely selfish viewpoint is taken by either party, that evils begin to creep in. True, safeguards are necessary on both sides to prevent exploitation of one party by the other, and to prevent the consumer suffering. These safeguards, as we have seen, existed in the Middle Ages until the selfish interests of the capitalist classes destroyed them by their control and exploitation of the Guild system. To-day the State has intervened, often unfortunately to protect the capitalists at the expense both of labour and the consumer interest. But for all that we must give the capitalist his due. At this firm it has been demonstrated, as at a host of other enlightened businesses, that the best interest both of consumer and of capitalist is served by treating industry, not as a means to enrich the employer, but as a service to the community as a whole. In the recent war, Capital and Labour combined, under the wise and paternal supervision of the Government, to give of their best in the service of their country. Is it too much to ask that the same unstinting service and sacrifice of personal advantage should be given in the cause of peace and reconstruction? Surely the answer lies in such firms as these we are considering, who have built up well-founded traditions of public service, based on a human and imaginative consideration of the basic needs of Labour and the economic requirements of the community.

This firm built its first canteen in 1922 to provide seating accommodation for two thousand people. This very soon proved too small. A dining-hall was consequently built to seat four thousand. Soon this also began to prove inadequate and the present canteen, with an area of nearly 100,000 square feet, was projected. It was completed in 1934 when it was formally opened by Royalty. It will now seat eight thousand at one sitting. The floor is panelled with 'marble terrazo', the decoration is pleasant, and the ventilation gives three complete changes of air in every hour. The kitchens cover an area of 5,124 square

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feet and are fitted with the latest possible equipment. The firm contributes the cost of heating, lighting, rent and rates, and meals are provided at the cost price of the food. A special arrangement is made for providing cheap meals for juveniles under sixteen, whose parents by filling up a form can obtain for them five midday meals per week of meat, potatoes, vegetables, and pudding for 1s. 8d., or 4d. per meal, the cost of which is deducted from their wages.

An important feature of this canteen is the service, whereby meat is served direct from the cooking oven to the consumer, instead of having been previously cooked and later re-heated as the majority of canteens. This is made possible by the recruitment of relays of helpers from the works' staff to assist in the actual service. These helpers stop work ten minutes before the lunch hour and are given a free meal for their help. The advantage from the point of view of nutriment in serving meals direct without re-heating can hardly be over-estimated.

The following are among extracts from the 'Works Guide' which relate to the facilities provided by the canteen and various welfare departments of this firm.

Tickets for meals are purchased from the ticket machines which are brought round the works each morning. A cup of tea is provided for each worker at his bench by means of a trolley service at 10 a.m. each day.

For those who prefer to bring their own food, hot cupboards are provided, where meals may be warmed, free of charge. Pots and hot water are also supplied for those bringing their own tea.

Pots and plates are provided for employees.

Cutlery may be borrowed on deposit of one shilling.

Those who travel by train, tram or bus, and arrive in the canteen before 7.50 a.m. may obtain a cup of tea free of charge.

The Welfare Department includes a Doctor's Consulting Room, Surgery, Dental Surgery, Sun-Ray Clinic, Chiropody, and Optical Departments and Rest Rooms for men and women.

The well-equipped surgery in charge of a fully qualified nurse is open at all times for cases of accidents or illness. Accidents, however slight, receive immediate attention.



27. A canteen kitchen in the North producing over 2,000 meals a day



28. A canteen kitchen in Scotland producing 4,000 meals a day



29. The cafeteria system in a modern American works canteen.
Note that customers help themselves and are not served



30. An American canteen built during the war in a modern
aircraft factory

Progressive Examples

With the permission of the departmental manager, employees may consult the doctor without appointment at the surgery on Mondays, Wednesdays, and Fridays, from 2.30-3 p.m.

A qualified dentist attends in the dental surgery and gives free consultation. A qualified nurse is also in attendance. Even free dental treatment is provided for juveniles under sixteen years of age. Appointments are made through the nurse in charge of the surgery.

A qualified optician attends in the optical surgery. Appointments can be made through the nurse in charge. Juveniles under sixteen years of age, with one year's service, are supplied with glasses free of charge.

Those wishing to take a course of sun-ray treatment produce a medical certificate giving full particulars of the treatment required, which is carried out under the supervision of a qualified nurse. Juveniles recommended for treatment by the firm's medical officer must first have the consent of their parents. Forms provided for this purpose may be obtained from the nurse in charge of the surgery, or from the welfare department.

A qualified chiropodist visits the surgery for the treatment of foot troubles. Appointments should be made through the nurse in charge.

An Employee's Sick Fund is in operation, and all employees are eligible for membership, irrespective of age or state of health. The fund is independent of, and additional to, the National Health Insurance and Workmen's Compensation Acts, and provides an additional security against loss of pay through sickness.

Those who desire to join the fund may fill in an application form, obtainable from the commissionaires, or from the Welfare Department, signifying their willingness to have a weekly contribution deducted from their wages.

There are special death benefits, maternity benefits, and grants for convalescent treatment at seaside homes for special cases.

The interest on invested Sick Fund contributions is paid into a separate account, and forms a Distress Fund, which is available for any member of the Sick Fund who is in financial difficulty

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through sickness or other causes. The fund also provides a number of free recommendations for convalescence at seaside homes. Applications for assistance from the Distress Fund are made to the Welfare Department.

A Loan Fund is also available for those who are in financial difficulties through sickness or any justifiable cause. Applications for assistance are made to the Welfare Department.

A deduction from wages of 3d. per week from employees earning more than £1 entitles contributors to free hospital and convalescent treatment, including treatment at the Royal Bath Hospital, Harrogate. Recommendations can be obtained from the departmental manager, or the Welfare Department.

To encourage thrift, the firm has its own savings bank which accepts deposits from all employees.

Employees may subscribe for savings certificates at the rate of 6d. per certificate (or multiples of 6d.) per week. On the basis of 6d. per week it would take thirty weeks to buy a 15s. certificate. Applications may be made, on a printed form supplied by the Welfare Department, for a sum to be deducted from wages each week for this purpose.

Two rebate vouchers per year are granted to every employee. These vouchers are available for use by the person to whom they are issued, or a female employee's nearest male relative who is not an employee of the firm, and entitles the user to 10 per cent on all orders. Vouchers are issued by foremen, and are not valid during the sale period. Vouchers must be presented on the payment of deposit, and within fourteen days of the issue of the voucher.

Orders will not be executed in under fourteen days, or one month prior to a holiday. Terms are 25 per cent with order, balance before delivery.

A cordial welcome is extended by the sports council to all employees who desire to take part in any branch of sport. Every effort is made to cater for all tastes and interests.

Membership of the sports club is open to all employees who contribute 1d. weekly. In addition to the weekly subscription there is a small entrance fee for active participation in some of the sections.

Progressive Examples

Members who contribute 3d. per week may enter any or all sections without payment of entrance fees. Sports included are:

Cricket (Ladies and Gents)	Tennis
Football	Billiards
Swimming (Ladies, Gents and Mixed)	Darts
Ladies' Netball	Badminton
Ladies' Hockey	Angling
Camera Club	Golf
Table Tennis	Boxing
Operatic and Dramatic Society	

Full information may be obtained on application to the Welfare Department, where enrolment for membership can be made. The Welfare staff welcome an opportunity of discussing any of the sections with prospective members, and every effort is made to introduce them to members of the sections in which they are interested.

Boys and girls between the ages of 14 and 18 are invited to join the firm's unit of the Youth Service Corps. It provides opportunities for voluntary public service and gives to young people a means of recreation and pleasure for themselves, while being of valuable service to the community.

A branch office of the Citizens' Advice Bureau has been set up in the Welfare Department, and free advice is given on every social and domestic problem. All difficulties with government forms, regulations or service problems are met by this bureau.

Loudspeaker equipment is installed throughout the factories. Programmes of gramophone and radio music are broadcast at regular intervals throughout the day.

This firm has a number of branch factories where extensive canteen facilities are also provided. These include several canteens accommodating from 2,000 to 3,000 people and similar welfare services to those provided at the main factory.

Facilities offered by this particular firm have been quoted in detail to show what can be done where courage and imagination are used by enterprising and progressive-minded employers. Here is another example, a well known Midland cocoa and chocolate manufactory.

This firm started business in 1831 and moved from the centre

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of a populous industrial city to a country village some few miles out where a new factory was specially built in 1879. At that time the firm employed 230 operatives. In 1939 it employed about 9,000 people. To-day their canteen feeds between 4,000 and 5,000 employees of all grades.

The present dining-room block including clubrooms and concert hall was completed in 1927. The building overlooks one of the recreation grounds and measures 274 feet by 200 feet. The basement provides dressing-room accommodation for 5,000 girls. There are at this factory eleven dining-rooms altogether. On the ground floor of the block are the kitchens, the main dining-room and the 'terrace restaurant'. In the two stories above are subsidiary dining-rooms and clubrooms for workpeople, foremen, forewomen, staffs and directors. Also the youth's clubroom, a library, and a lecture room. The concert hall seats 1,050 people and has a three-manual organ. There are splendidly equipped doctors' and dental surgeries and consulting rooms also in this building.

About 50 per cent of the employees at this factory are women and girls. While it is chiefly the midday meal which has to be catered for, a certain number of breakfasts have also to be provided, also, especially in winter, several hundred teas in the canteen itself, while trolleys go round to each department morning and afternoon with hot drinks.

A distinction is made between dining-rooms, where a cafeteria 'self-service' system is in operation, and restaurants, where waitresses serve the meals and where an extra charge is made. The restaurants seat about 600 people, the dining-rooms 5,000. Square footage per person is reckoned as being 10 in the former and 8.1 in the latter. There are separate dining-rooms for each sex, but the restaurants are open to both sexes. Except for directors and senior management staff, no distinction is made as between the various grades using the accommodation, e.g. the terrace restaurant at lunchtime presents a fair cross-section of the personnel—factory and office workers, supervisory, technical and junior management staffs. Junior girls tend to keep to particular rooms and the youths' club has its own dining-room, used by boys from fourteen to twenty-one.

Progress or Reaction?

PROGRESS OR REACTION?

These two examples alone are surely enough to prove that to advocate better and wider welfare services in industry is not merely to indulge in vague and unpractical idealism. These two firms, and hundreds like them, have proved not only that welfare of the highest standard is possible, but also that it pays a hundredfold. Industrial welfare is—or should be—capitalism's answer to industrial unrest. Once again let it be stressed that capital and labour are not enemies trying to get as much out of each other as possible, but partners combining in performing a joint service to the community. The real promoters of the class war are those who deliberately, through shortsighted and reactionary self-interest, put narrow class or personal interest before the needs of the community as a whole and stir up hatred and unrest either on the one hand by exploitation of the workers for motives of greed or power or on the other by sabotage of industry by pointless strikes. In both cases the motives are the same and the outlook is exactly similar. The ruthless employer of the industrial revolution who worked his operatives to death and permanent deformity was just as blind as the fanatical trade union leader or unofficial agitator who invites employees to mutiny without justification or purpose. To-day trade unionism by its wisdom and moderation has established for itself a position of respect and social usefulness which none deny. Irresponsible forces may, by unconstitutional action, nullify much of the fruits so dearly won by the courage and perseverance of pioneer trade unionists, if they refuse to co-operate intelligently and progressively with the more constructive and enlightened forces of capitalism. Power may be just as dangerous in the hands of Labour as it has been in the hands of unenlightened capitalism. History has shown that the destruction of one class by another merely leads to the repetition of the tyrannies of the former class by that which had taken its place. As has been truly said of communism in Russia, the dictatorship of Lenin and Stalin has merely assumed the old Czarist uniform and is wearing it inside out.

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FUTURE DEVELOPMENTS

What then is the future in England? It is surely the extension of intelligent free enterprise in industry making use of this great new service of industrial welfare to its utmost. Since the factory is the natural centre of the industrial community it must itself become its own community centre. The work of the health centre at Peckham must be developed within the factory and spread outwards to embrace the community as a whole. One of the facts which is most highly deplored by the promoters of the Peckham Experiment is that they are only in contact with a comparatively small section of the life of their members. There are several blind spots in their observations of individuals which are bound to make their records incomplete. One of these blind spots is the children's education. For the greater part of the day children are at school subject to influences of the greatest biological importance. Yet the centre has no influence on and no chance of observation of what goes on during these vital hours. Another blind spot is employment, though intelligent employers in the district are already beginning to use the centre as a source of information on possible employees. If a full study of social health is to be made of the individual, that study must also include as full as possible a study of individual and family environment. What more important environmental influence upon any individual can there be than the place where he spends his working hours?

The factory is the natural community centre in an industrial society whose economic basis is work and the factory can quite easily become so. Already we find educational units established in factories side by side with health units and feeding centres. Many factories employ two or more members of one family, and those with well-developed welfare activities allow members of employees' families certain privileges over the use of them, even though those members themselves may not be employed in the factory in question. Here, then, is the basis for the future: a combination of the Peckham Experiment with the factory welfare centre so that a fully comprehensive study can be made of the individual with his family in his own environment. A

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helpful suggestion to this end has been put forward in the combination of factories for the promotion of Group Industrial Community Centres serving a number of industrial units and therefore with a greater chance still of embracing the family at all its points. This suggestion has arisen, as we have seen is inevitable, from the canteen idea. It is outlined in a report of the Fabian Economics Committee published in December 1945, which contains the following observations: 'We shall have to recognize what we should have recognized long ago, that the factory is the main social unit next to the family in modern industrial society. . . . In many cases it is practically impossible for existing factories to make suitable welfare and canteen arrangements . . . because they are crowded on sites which leave no room for this and are surrounded by buildings so that they cannot expand, or because the factories are too small to be able to make decent arrangements for themselves. In these cases it may be highly desirable to organize canteen and similar services for groups of factories, and for the Ministry of Labour to retain the power to enforce and develop this type of collective provision. Similarly when a number of small factories are moving to a new site, for example on a trading estate, welfare provisions of this kind may well be made an integral part of the scheme.

'The biggest practical development', continues the report, 'is undoubtedly the provision of meals for workers at their place of work. The Factory Canteens Order, made in 1940, required that all war factories with more than 250 workers should provide works canteens. Here, again, progress has been achieved more by persuasion than by outright use of statutory powers. By the end of 1941 Special Orders were issued to bring in building and civil engineering sites, docks and mines, and here, too, the response was at a high level. But the gaps left by the usual exemption of smaller plants is notable. In the matter of meal provision, the British Restaurants set up by the Ministry of Food, though by no means limited to the use of factory workers or sited only where factory workers are, having frequently been placed with an eye to the needs of small firms engaged on important work and unable to provide feeding facilities them-

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selves. 'This fact reinforces the argument above, that welfare provision should be made outside where they cannot be made within the factory gates.'

Here, then, is a possible and profitable line of development for industrial catering and welfare in the future, namely, group canteen services forming the nucleus of a complete community centre on the lines of the Peckham Experiment. As we have seen from the Factory Inspectors' Report of the 1914 war years, group canteen facilities, or at least group messrooms, are no new thing. To-day the idea could be greatly expanded to include all the services provided by the most progressive of the larger firms, such as those described above, and to consolidate knowledge of the individual and promote the health of the community.

The underlying basis of such centres would be the same as that of the pioneer health centre at Peckham, namely, to discover the principles on which a healthy industrial community can be built. The first thing which the Peckham investigators found was that only 9 per cent of the individuals who passed through their hands could be truthfully called completely healthy. The majority of the rest were suffering from ailments which, though not chronic, would inevitably become so later on, causing eventually pain, inconvenience, incapacity and possibly premature death. 25 per cent of the individuals examined were definitely in a state of disease. Nor was this survey taken over a restricted field. Over 3,000 individuals were examined—a fair sample of industrial society. A similar survey in any industrial community would probably yield much the same results. Obviously there is something fundamentally wrong with a society which can only show one-tenth of its population as healthy, and it is to put right that wrong that more Peckham experiments are necessary.

Is it not obvious that the responsibility and the opportunity for providing similar services all over the country belongs to industry and industry alone? If industry does not take the opportunity the State will step in and take it—and with it, a large slice of industry's chances to display initiative. One hears a good deal of complaints to-day about the restricting influence of

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State interference, but on the other side it must be realized that the State has been forced to step in too often because the individual capitalist made interference necessary by his own lack of enterprise and public spirit. Here, then, in group industrial welfare centres based on the nucleus of well run canteens and restaurants, as at Peckham, is the chance to form a pool of vital medical and psychological information as well as to provide, as the Peckham pioneers have done, the necessary environment to remedy the defects which are detected. At Peckham there are swimming pools, gymnasia, games rooms, libraries, and all that is needed for healthy recreation. Best of all there is an atmosphere of cheerful comradeship and social activity which draws not only individuals but whole families back into the community circle as they used to be in medieval times. The isolation of the individual and the family is one of the greatest bugbears of modern civilization. Loneliness, as every psychologist knows, is one of the greatest causes of mental and moral disorder. Man is essentially a social animal finding his true stature not only in the family but in that family of families, which we call the community. A family which is isolated from other families, as are the vast majority of families in a modern industrial town, is no more healthy than an individual isolated from other individuals, an animal isolated from other animals or a plant isolated from other plants. Just as it is essential for the growth and reproduction of a plant that it should be able to inter-pollenate with other plants, so is it essential for the human individual that he or she should be able to interchange ideas and share activities with other individuals. The object of Nature is always to achieve the maximum variety. Thus to restrict individuals within narrow walls is to stunt their growth and inevitably injure their health physically as well as mentally. Man is not merely a machine but a living, breathing, growing organism whose maximum efficiency can only be achieved in circumstances of maximum freedom. He must be free to choose his friends from the widest possible circle and free to choose a mate from the greatest possible variety of types. One of the reasons why marriage to-day is exhibiting so many disasters is that young people are not being given the opportunity to choose

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widely and wisely among the opposite sex, both through ignorance and lack of opportunity. Here is another great service which can be done by the community centre—to widen the circle of acquaintance between young people of both sexes and also to clear away many of the cobwebs of superstition and prejudice which still exist to mar a healthy relationship between them.

One step in the right direction which is still capable of enormous development was made with the establishment of workers' hostels on the initiative of Mr. Ernest Bevin, then Minister of Labour and National Service. The story of these hostels is worth considering.

NATIONAL SERVICE INDUSTRIAL HOSTELS

The National Service Hostels Corporation Limited (a company limited by guarantee and not having a share capital) was incorporated in May 1941, as a result of action by the Minister of Labour and National Service. Its main object was to manage and control hostels erected by the Government, for the purpose of housing workers called up throughout the country under the National Service Orders. These hostels represent a new and important feature of our social life and deserve a good deal of study by those who are interested in social conditions and institutions.

They are not a permanent institution, but they are continuing to operate during the immediate reconstruction period to meet urgent requirements of the Government's programme. They represent among other things an important experiment in community living. The necessity for these hostels arose out of the fact (to quote the Fabian Report on Labour, 1945) that 'wartime production centres differed from the production centres of peacetime industry, and normal accommodation did not match the requirements'. Large numbers of young men and women found themselves drafted away from their home areas to undertake work of national importance. There were no billets to be had, or only very inadequate ones. The Ministry of Labour and National Service had to step in and supply the deficiency. The National Service Hostels were the result.

National Service Industrial Hostels

In the words of the Fabian Report referred to above, these hostels are 'for the most part . . . one-story buildings, with cubicle accommodation for 500 to 1,000 people. They have good welfare and recreational facilities in the shape of canteens, libraries, rooms for games, writing rooms and the like. Those situated in the more isolated areas, where peacetime industry is unlikely to grow, will almost certainly be claimed for holiday purposes, or as educational establishments on the lines of "people's colleges". The hostels which have been put up in the crowded production centres of the Midlands, etc., may also be made into settlements and educational establishments. But it may be more useful to preserve these as hostels for the younger unmarried workers, living away from home, and to build schools and colleges afresh. One of the strongest objections of young people to going away from home is the fear of "being alone in the world". The prospect of living in a hostel instead of in the bleakness of small lodgings may prove yet another incentive to much needed mobility.' One of the most modern and well equipped hostels at Farnborough, near Aldershot, houses Ministry of Supply research technicians, and is likely to continue in use indefinitely. These hostels consist of a 'Welfare Block' housing the dining-room, concert hall, reading and recreation rooms and offices, and scattered around is a series of 'prefabricated' huts for sleeping, each provided with a sitting-room. Central heating is laid on throughout the building. The dining-rooms visited were in all cases bright and cheerful and the kitchens well equipped. The general atmosphere was pleasant.

Each hostel has a residents' committee from which are formed various sub-committees to deal with such matters as sport, amateur dramatics, entertainments and so forth. The canteen is run by a full-time caterer who is responsible to the hostel manager. There is generally also a welfare and entertainments officer, a matron in charge of the sick bay and an office staff. The responsible spirit in which the young residents tackled their duties on the residents' committee, at one hostel visited was most impressive. Conversations with several of the residents showed that the amenities of the hostels were greatly appreciated by the majority. A small minority of grouchers, though to

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be found in every such community, served to keep the democratic spirit alive, and to keep the committee on the alert. On the whole, however, the experiment may be said to have succeeded beyond all reasonable expectations and to have produced an atmosphere of cheerful co-operation and contentment which are a valuable contribution to the science of community living.

The catering for these establishments follows general lines, laid down by the head office of the corporation, though a good deal of discretion is left to the local caterer.

Food supplies are generally obtained locally with the exception of certain standard household requirements which are supplied through the corporation's central buying department. The system is thus very similar to that in force in a large industrial catering contractor's establishment.

Cost records are kept at each hostel to show how much is spent on food (and catering staff wages) per head per week and details are given, under main heads, of the types of food purchased so that the regional control may be satisfied that a balanced diet is available at all hostels.

One caterer produced the most excellent meals by the ingenious method of using the national pride of various members of her kitchen staff to stimulate a healthy rivalry between them. When Mrs. X who was Irish, was on duty, Irish dishes were to the fore, and their cooking was magnificent. Miss Y, on the other hand, was all out to show the superiority of her Scottish delicacies, while a Welsh girl excelled at certain Welsh dishes. Thus variety was obtained and national rivalry satisfied, and the results, as demonstrated in the meals was remarkably successful. A sense of humour and a sense of humanity showed up as valuable assets in a hostel caterer, if he or she is going to get the best out of the staff.

The charge for residence at a National Service Industrial Hostel could hardly be called unreasonable. They are (as from 29th July 1946) 30s. weekly for men and 25s. weekly for women. Generally speaking, the residents support a Welfare Fund, mainly for the provision of sports and entertainments. Visitors can be brought into certain meals, at a charge of 1s. 6d. per

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meal. A tea bar is open in the evenings where tea, coffee and cakes are provided at very low prices. At the larger hostels there is also a shop open at various periods of the day for the sale of cigarettes, tooth-paste, stationery, and other useful articles. Each hostel is supplied with a library. In the sports room are table-tennis tables, dartboards and often billiards tables. One room is a 'quiet room' where residents may read or write without fear of disturbance. The entertainment halls are fitted up with theatrical stage and lighting and can also be used for dancing. Loud-speakers in all rooms, except the 'quiet room', relay radio programmes and form an intercommunication system for notices, messages and so forth.

Gramophone recitals can also be given on the hostel's radio-gram. The standard of behaviour is high in these hostels on the whole. Rowdy elements soon found that bad behaviour did not pay and that the privilege of living in the hostel was worth the observance of a few simple and sensible rules designed for the benefit of the community as a whole.

CATERING AS A SCIENCE

A number of firms, while they recognize vaguely the need for a works or factory canteen, or at least feel a sense of obligation to provide one, tend to look upon it only as a sideline or awkward necessity. Its management may thus be relegated to some individual who is felt to be having too little to do. It is seldom visited by the executive staff and often falls into abeyance, not because there is not a need for it, but because it is so badly managed, and so little interest is taken in it by the management of the firm, that the workers themselves lose interest and enthusiasm for it, and the apathy of the directors is passed on to the operatives who express it in transferring their patronage elsewhere. Among many important factors in keeping a canteen popular among workers is that of providing cheerful, bright and comfortable amenities for eating. Bare brick walls, bad lighting, dingy chairs and tables, do little to encourage attendance, however good the food or however cheap compared with outside sources. The average worker, particularly in these days of comparatively high wages, would, on the whole, far rather

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pay a little extra and feel that he is getting something attractive for his money, than pay a small amount and be depressed by his surroundings. The psychological effect of attractive surroundings for eating is hardly capable of exaggeration. And this psychological factor also enters into the service of food and should be given considerable attention in deciding between the various systems available such as cafeteria, service hatch, hot-plate, etc.

Enough has already been said about the quality of the food itself to make repetition necessary, but bound up with the question of quality is also the question of cooking. Until comparatively recently, it often seemed to be the object of all institutional cookery to make good food as unappetizing as possible to the recipient. Painful memories of one's schooldays call to mind meat overcooked to resemble leather, watery and tasteless potatoes, mashed and unrecognizable green vegetables. Good food was systematically marred in such a way as not only to make it unpalatable if not at times actually nauseating, but as to deprive it of a large portion of its nutritive value. The process was carried on, one supposes, under a false illusion of economy, probably not unmixed with the old superstition that it is bad for the morals of the young to be given food which they can enjoy. In all mass catering, of which the object was not the immediate profit of the supplier, there was always a tendency for this to happen. Only to-day, owing to the efforts of a handful of intelligent and public-spirited men like Sir Jack Drummond and Sir John Boyd-Orr is it becoming realized that decently cooked and enjoyable food has in itself a value both psychological and physical, in addition to whatever nutritive value it may contain. Thus in the recent war army catering was raised to the status of a science, and messing officers, catering officers and army cooks were trained at scientific institutions such as the Army School of Catering at Aldershot, to provide food which was at the same time nutritive, properly cooked, appetizing and attractive to the soldier. The result is that many ex-service men and women look back on their war service as the best-fed period of their lives, not only because of the quantity of the food provided, but also the quality of its cooking and service.

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Fortunately the same may be said for many who have been catered for in industrial canteens and dining-rooms, but not, unfortunately, for all. Many industrial canteens to-day provide a better meal for 1s. or 1s. 3d. than can be obtained in a London restaurant for 15s. by the time one has paid service charges, house charges, tips and charges for coffee and extras. People will often pay ridiculous amounts of money merely for the privilege of having a table to themselves (though even this is rare nowadays), a comfortable chair, pleasant surroundings or a band (if they like music with their food), and will put up with indifferent fare and even indifferent service for these amenities and for the imagined cachet of eating at a well-known restaurant. There is no reason why an industrial canteen should not be at least as attractive as an ordinary restaurant while providing food as palatable and well-cooked as the best. A restaurant has many problems to face which an industrial canteen can eliminate. For instance, numbers of customers can be ascertained beforehand by having previously ordered meals as is done at many firms. The bulk buying of a large number of industrial canteens gives them a distinct advantage over the numerous small restaurants which litter our towns, particularly London.

Complaints have been met with that workers do not appreciate a pleasantly decorated and well-kept canteen, and that men ignore washing facilities and sit down dirty. That men prefer squalor to cleanliness and feel awkward in decent surroundings has also been stated on more than one occasion. But surely this is a matter of education and propaganda. If decent amenities are provided sooner or later they will be appreciated, and used. But users may have to be educated by various forms of suggestions to use them properly. The old plea that slum dwellers provided with bathrooms used baths as coal-bins was really an indictment of an educational system which allowed one section of the population to grow up in squalor and ignorance while others were living in civilized luxury. To-day, general education has done much to eliminate this ignorance, but there is still room for more and firms themselves can do much to educate their employees not only, as is being done most effectively in

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many instances, in technical knowledge calculated to increase their efficiency as operatives, but in social and general knowledge, in order to make them more civilized and more socially-minded human beings. Many firms have admirable educational establishments and amenities for their juveniles. One firm recently visited showed with pride a charmingly equipped nursery school for the infants of their married workers. Work and education naturally go together, and since work is the highest form of social contribution to the common welfare, it should go hand in hand with general education in social betterment. Adults are often just as much in need of education as children, and probably better able to make use of it. Many progressive firms realized this before the end of the last century as we have already seen. The role of the factory of the future is to be not merely a physical machine for producing so much material output, but to be a unit in the social organism as a whole, contributing its psychological, as well as its material, quota to the general welfare of mankind. Experience at a number of industrial hostels run by the National Service Hostels Corporations, has shown that all types can be trained to conform to discipline and to realize the value of such conformity in the end as a factor for increasing the general amenities provided for the hostel community. Unruly elements soon found out the mistake of breaking the regulations when it was pointed out that not only they, but others, suffered thereby and that regulations were necessary for the smooth running of the whole, and not merely evidence of a tyrannous autocracy on the part of the management. So in factory canteens, where adequate publicity has been given to improvements and facilities and adequate reasons stated for rules and regulations, it has generally been found that the workers as a whole have enough sense to appreciate them. The most potent force for unrest is ignorance. The more a managing body trusts and confides in the good sense of their employees, the less likelihood is there of prejudice and dissatisfaction. The secret of Lord Montgomery's success as a military leader was that he always let everybody know what was going on and why. He made the lowliest private a co-partner in his strategic evolutions and so won his respect.

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loyalty and co-operation. More of this spirit is required to-day in industry. And the industrial canteen is one of the channels through which it can be developed.

SUMMING UP

To sum up then. It is essential that the industrial canteen idea, based on the natural sense of responsibility of the employer to those whom he employs and stimulated and developed by the last two wars, should not be allowed to languish through apathy and lack of enterprise. On the contrary it must be seen as the nucleus of a wide and all-embracing system of industrial and social welfare whose benefit to society can be incalculable. As we saw in the period between the wars, the scientific attitude has now proved itself of the greatest value not only in material things but in psychological ones. Not only has the science of nutrition made enormous strides so that we can now measure accurately what foods are necessary to keep every man and woman as physically fit as possible for their job, but we can go further and learn much about the effect of environment on the individual both physically and psychologically. Industrial welfare has become a science which is closely linked up with the science of Human Biology. To-day the only weapon we have against the misuse of science by madmen for destructive purposes is its use by sane constructive scientists for enriching and widening the life of the individual and eliminating physical and mental disorders and destructive forces. To-day we live inevitably in an industrial civilization—a civilization made possible by the enormous advances of physical science over the last two centuries. The future of civilization depends on how we make use both of this vast pool of knowledge the scientists have bequeathed to us, and also of the tremendous efficiency of new techniques of investigation. The power to use or abuse lies to-day very largely with the great industrialists who are now more powerful than the great landed barons of the Middle Ages. Is industry going to face up to its responsibilities and use this great power for the benefit of the society whom it serves and from whom it draws its revenue? Or is it going to put social considerations behind it and pursue the ultimate goal of gain,

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irrespective of human welfare? Ready to its hand lies this great new instrument of science, science not only of things but the science of morals and philosophy. Is industry going to use this science wisely to promote social welfare and happiness or is it going back to the bad old rut of 'catch as catch can' and 'to hell with you, Jack, I'm all right'. This book is a book about industrial catering but industrial catering is only one phase of welfare, albeit a most vital and important one.

As a prominent industrialist—who has also given a good deal of his time to writing on social problems—wrote in 1921, 'I once heard it remarked that no one can be a statesman, a philosopher, a poet, or a lover unless he has had something to eat during the last forty-eight hours.' I should like to add that he is not likely to perform any of these functions as well as he might do, unless his food has been well prepared and supplied under comfortable and restful conditions. Employers are beginning to appreciate to a much greater degree how important a part a canteen plays in the economy of a factory. I think we learned a good many lessons during the war (1914-18) when so much attention was devoted to the matter.

'A canteen should be something more than an eating shop. It should be a place where the fullest possible advantage can be taken of the dinner hour, for the renewal of vital energy which has been expended during the morning's work. Here, once again, let me plead for a little imagination on the part of my fellow employers. If a canteen is to be established, and I think it will soon come to be regarded as a *sine qua non* where any appreciable number stay at the factory for meals, it is worth while to make that canteen attractive and comfortable.'¹ Napoleon once said that an army marches on its stomach—so does civilization. The importance of this was emphasized at the Hot Springs Conference. Food is, and always has been, an integral factor in human welfare, and to deny it is to be guilty of mealy-mouthed hypocrisy. It is as stupid to deny the importance of foundations in noble architecture. But food, like foundations, is not everything, it should be the beginning not the end of great building. So from food we are led on naturally to

¹ B. Seeböhm Rowntree, *The Human Factor in Business*, p. 61.

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general welfare, to the health of the individual and the health of the community. From food we are led on to consider all physical necessities of healthy existence and from those we are led on to consider mental and spiritual needs. Here science can tell us a great deal but science is still hampered by lack of material. Science and industry could combine profitably for the future in evolving a more efficient individual—more efficient not merely in mechanical operations but more efficient as an organism in society. To-day with the great resources of science at our disposal we still find millions starving and destroying themselves in a world capable of producing more than enough for everybody. In peacetime we have slumps and over-production producing anxiety and widespread misery which inevitably pave the way to war. The majority of people in this world are not merely undernourished physically, they are even more undernourished mentally.

Education should go side by side with nourishment and nourishment should go side by side with work. To-day is the great opportunity to free humanity from bondage and increase its powers of life—individual life and life in the family and society. The industrial canteen has its part to play as a nucleus of a wider life for everybody.

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